

Centre for
Resource Studies

Queen's University
Kingston, Ontario

Employee Relations Initiatives in Canadian Mining

Proceedings No. 5



**EMPLOYEE RELATIONS INITIATIVES
IN CANADIAN MINING**

**PROCEEDINGS OF THE
FOURTH CRS POLICY DISCUSSION SEMINAR
NOVEMBER 22-24, 1978**

**CENTRE FOR RESOURCE STUDIES
FEBRUARY 1979**



91-04833/

ISBN 0 88757 014 3
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FOREWORD

This volume contains the proceedings of the fourth policy discussion seminar sponsored by the Centre for Resource Studies. The seminar series, instituted in 1977, brings together individuals from governments, industries, labour, universities, and other groups, to exchange their knowledge, experience, and views on selected policy issues related to Canada's mineral resources. The subject of employee relations was chosen for the fourth seminar because manpower problems are a matter of longstanding and continuing concern in the Canadian mining industry.

The seminar was held at the Donald Gordon Centre for Continuing Education in Kingston, and was organized by Dr. Peter R. Richardson, an associate of the Centre and a faculty member at Queen's University. The proceedings were edited by Mrs. Margot Wojciechowski, assistant director of the Centre, and produced by Mrs. Marilyn E. Rivington.

The Centre is grateful for the papers prepared by the speakers and for the active participation of other conferees. While final resolution of manpower problems can scarcely be expected to emerge from such a seminar, we hope that the exchange of views and experiences of the participants will be of assistance to the mineral industry and others concerned with mineral resource policy.

C. George Miller
Executive Director
Centre for Resource Studies



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CENTRE FOR RESOURCE STUDIES
FOURTH POLICY DISCUSSION SEMINAR

EMPLOYEE RELATIONS INITIATIVES IN THE CANADIAN MINING INDUSTRY

The CRS policy discussion seminars have two prime functions. The first is to diffuse information on important policy initiatives throughout industry, government, and other concerned institutions. The second is to create an ongoing dialogue between individuals who are involved with the mineral industry. The proceedings reflect the process adopted to achieve these ends. The discussion papers present new ideas and are intended to lead to general discussion of the issues in the open sessions. Small group sessions supplement the open sessions and are used to analyze segments of the area in depth. The proceedings are intended to diffuse the results of this process to a wider audience.

The array of organizations represented at this seminar, and the diversity of backgrounds of the people representing them, indicate the breadth of employee relations concerns and the importance attached to them by mining companies, governments, and other institutions.

In 1973 and 1974, manpower problems facing the mining industry were critical. Turnover rates in excess of 100 percent were common, labour shortages were pervasive, and companies were greatly concerned. These problems resulted in low productivity, high costs, and lost production. Today, many of these problems have lessened in the face of generally poor economic conditions, although in some areas and for certain types of jobs the industry still experiences shortages and high turnover.

Two important underlying questions remain:

- i) have the major issues been resolved, or
- ii) have they been submerged by the current economic situation, and will they re-emerge when the economy recovers?

Companies are attacking the problem on many fronts, but the area of concern is broad and much more remains to be done. In the seminar the focus was on:

- i) important factors in employee recruitment and retention
- ii) community types and lifestyles preferred by employees
- iii) what types of employees are required
- iv) how employees are best motivated, and provided with a feeling of being a stakeholder in the firm and the mining community.

MANPOWER ISSUES IN CANADIAN MINING

by

William J. Bennett

INTRODUCTION

Since this seminar is being sponsored by the Centre for Resource Studies, I think it appropriate to remind you of the reasons for the establishment of the centre.

The importance of the role of the mining industry in the Canadian economy was first called into question in the report of the Royal Commission on Taxation. That report, commonly known as the Carter Report, based its drastic recommendations with respect to the taxation of the mining industry on the assumption that, while tax incentives of various kinds had undoubtedly contributed greatly to the growth of the industry, this growth had caused what the commission described as a mis-allocation of resources. As you are well aware, this theme was taken up by others, both in professional and in some political circles. This, with subsequent developments in the fields of the environment and health and safety, undoubtedly created an 'image' problem for the industry.

Some of us in the industry were convinced that this situation could be corrected only through the establishment of a research centre which would carry out research on all aspects of mineral policy. We also believed that the centre should be located in a university, and for two reasons. First, a university would have access to the various disciplines required, either from its own resources or from the resources of other universities. Second, the publications of a centre operating under the sponsorship of a university could be expected to have a high degree of credibility, with the public at large, and more particularly with

governments, which have the ultimate responsibility for formulating mineral policy. Queen's University agreed to undertake the sponsorship of the center, and the funding is being provided jointly by the Department of Energy, Mines and Resources and The Mining Association of Canada.

MANPOWER ISSUES

In the relatively short period since its establishment in 1973, the centre has issued a number of important studies bearing on mineral policy. Included in these is a study entitled 'Human Resources in Canadian Mining', by J.A. MacMillan *et al.* which was published in 1977. While it is described as a preliminary analysis, the study does, in my judgement, contain a very comprehensive examination of every aspect of the manpower issue.

Reduced to its simplest terms, the manpower issue revolves about the question as to how the mining industry is to recruit and retain, both in the present and in the future, the kind of personnel it needs for its successful operation. The authors of the study have noted that it is difficult to establish a single recruitment and retention program which will have relevance for the whole industry because of the wide differences in mining operations. Such differences as ore reserves, products and markets, location, the jurisdiction in which the mine operates, and the nature of the mining method and milling process all affect recruiting and retention policy. Notwithstanding these differences, the authors of the study have listed six issues which they consider basic to the development of a sound human resource policy for the industry as a whole. These issues are as follows:

- i) the supply of an adequate number of personnel to the Canadian mineral industries
- ii) the financial rewards and benefits they are to receive
- iii) the development of adequate skills in the work force and the ability of individuals to create rewarding careers in the mineral industries
- iv) the retention of workers in mining firms and communities
- v) the provision of safe and healthy working environments
- vi) increased involvement of individual workers in decisions that affect their work environment.

Time does not permit me to comment on all of these issues, but I would like to discuss several of them.

Supply

The question of manpower supply referred to in the first issue is a problem throughout the industry, but it is perhaps more acute where a mining company must, because of governmental restraints, concentrate its recruiting in an area where there is no pool of industrial labour. The recruitment strategies proposed by the authors (in this section of the study they have drawn heavily on a previous study prepared for The Mining Association of Canada by T. Cawsey and P.R. Richardson)

provide useful guidelines. Obviously, these guidelines will have to be adapted to particular situations, and this will not be easy where there is a limited number of potential candidates to meet the job specification. In such circumstances the recruiter may have little scope for selection. In many cases he must choose a candidate who meets the job requirement but whose record of job-jumping leaves something to be desired, or he must adopt the 'warm body approach' described by Cawsey and Richardson.

I have in mind the experience of the Iron Ore Company of Canada in its recruitment program in Newfoundland, where there is a very limited supply of candidates with industrial experience. The recruiting program there, difficult under normal operating conditions, is further complicated in periods of expansion when large additions must be made to the work force. For several years after we commissioned our last large expansion at Labrador City, we had to fall back on the trade schools for the bulk of our maintenance labour with the result that, in some periods, the ratio of apprentices to journeymen was as high as three to one. As might be expected, the turnover rate with this type of recruit was exceedingly high. Moreover, the company has found it necessary to expand its already extensive and costly training program.

Financial Rewards and Benefits

With respect to the second issue, financial rewards and benefits, the MacMillan study contains some interesting statistics on comparative compensation in different sectors of Canadian industry over the period 1948 to 1973. These statistics indicate that, with the exception of the construction industry, compensation in the mining industry has been consistently higher than compensation in other sectors. However, I would point out that the statistical comparisons do not indicate the full extent of the differentials. In the mining industry, and this is particularly true of mines located in remote and isolated areas, employees benefit from subsidies of various kinds. Frequently these subsidies do not take the form of direct payments and are therefore not reflected in such statistics as weekly earnings. However, subsidies certainly have the effect of increasing disposable income and disposable income provides the best measure of the monetary value of a job. Having said this, I agree that it would be difficult to establish a comparison of financial rewards in terms of disposable income.

Retention

Item four concerns retention policy, and here the authors have stressed the importance of a normal community life. To achieve this, there must be good housing and schools, a variety of recreational facilities and the full range of municipal services. The authors have articulated what I believe is recognized fully by today's management. However, my memory goes back to the days in the mid-1930s when

it was the practice of mining companies to provide housing for senior supervision only. The bulk of the work force was accommodated in bunkhouses. Those who, in time, wanted housing, were largely left to their own resources in providing it. The other community services such as schools and hospitals usually came in slow stages, as did the establishment of municipal government.

The pattern of community development has completely changed, and we would all agree that this has been a good thing. In the case of most of the major mining developments which have occurred in the post-war period, and I refer particularly to those in remote areas, the company has created the social infrastructure as an essential part of the mine development program. This has certainly been true of the iron ore industry in Quebec-Labrador which has, in the short space of 25 years, created seven new municipalities with a population now in excess of 75,000 persons. These communities have all of the amenities: good homes, excellent schools and hospitals, and a wide variety of recreational facilities. Without exception, the full cost of the original infrastructure was financed by the mining companies without government assistance. The companies have also participated in expansion costs, and throughout the period have provided the main source of revenue for these municipalities.

The experience of the Iron Ore Company of Canada at its Labrador City operation points up, in a special way, the importance of family accommodation in any program of employee retention. The houses required during the initial period of operations, which began in 1962, were built by the company and rented to its employees. In 1966, we became convinced that house ownership was essential to a normal community life. We established a program which gave the employee an incentive to purchase a company house and launched a program of house building which extended over a period of seven years. The program was designed to enable the employee to purchase a house under very favourable terms. Financing was arranged through 30-year mortgages which the company guaranteed. The company contributed substantially to the cost of the house as a means of reducing the principal amount of the mortgage and also undertook to absorb a portion of the interest charge. The success of the program is evidenced by the fact that the bulk of the housing in Labrador City is now employee-owned. Since the beginning of operations in 1962, the company has participated in the financing of approximately 2,500 family units. At the present time, in excess of 75 percent of the force at Labrador City is accommodated in such family housing.

While other factors were undoubtedly at play, the availability of family accommodation has been a major factor in reducing turnover. The turnover rate of employees occupying such accommodation is low. While it is difficult to quantify the difference between the cost of turnover and the cost of housing subsidies, we are satisfied that the balance is very much in favour of the latter. Turnover of employees of single status (that is, single employees or married employees whose families reside elsewhere) is still too high. Some part of this may be due to the mobility

to be expected of employees in their early twenties, and some part of it may be due to the point, made in the Cawsey and Richardson study, that a community life designed primarily for married persons may well hold fewer attractions for young single persons.

The human resource study has stressed the fact that the existence of a full range of community services is not, in itself, sufficient. There must also be employee participation in community activities. This presents no problem in recreational activities where the employees usually participate through clubs and associations. However, it can sometimes be a problem in the evolution of municipal government. At the first stage of such evolution, the company usually owns and operates the municipal services, and the community is what is commonly described as a 'company town', with all of the unfavourable connotations which that term may imply. This stage is usually followed by the establishment of a local improvement district by the provincial government. The governing body, a board of trustees appointed by the provincial government, has full power to operate the municipality and to levy such taxes as may be required for operating and capital purposes. At this stage, the residents of the municipality have no voice in the management of municipal affairs. The final stage in the evolution is the establishment of representative government through the election of a mayor and council.

At each stage in the process, the company's role can be a difficult one, particularly if the majority of the residents are company employees. Since the company financed the cost of the original infrastructure and is expected to furnish the major part of the continuing revenues needed by the municipality for operating and capital purposes, it is not unnatural that it should wish to have some voice in the planning and operation of the municipality. It is this which sometimes gives rise to tensions and conflicts which can affect employer-employee relations.

Admittedly, the availability of a normal community life is a powerful factor in retention policy, but even where such community life exists, there is another factor at play which is difficult to analyze and difficult to quantify, namely the sense of isolation which often prevails in mining communities located in remote areas. In one of the studies undertaken for The Mining Association, it was noted that distance from urban centres did not appear to be an important factor in the turn-over experience. I suggest that the problem here is not primarily one of distance but rather the availability of cheap and easy access to outside centres. In the experience of the Iron Ore Company of Canada, the lack of access by highway is the major cause of the feeling of isolation which is so frequently given as the reason for separation at our Schefferville and Labrador City operations. Both of these communities have air service, but this is costly and does not provide the flexibility that the employee enjoys when he can use his own car for a weekend trip to some outside centre. It may well be that he does not take advantage of highway access too frequently, but the fact that the opportunity is available is the important element in combatting the sense of isolation. This kind of isolation problem is exceed-

ingly difficult to cope with in the development of a sound retention policy. The final solution must await the construction of a highway and this, of course, is the responsibility of government.

Worker Involvement

The sixth basic issue listed by the authors, 'increased involvement of individual workers in decisions that affect their work environment', might be construed as meaning the use of committees established under the collective bargaining agreement to deal with such matters as health and safety. The theme of employee involvement is discussed at greater length in the study in the section dealing with industrial relations. The authors are very much concerned with the 'adversary' relationship between union and management, and they cite this as one of the probable causes of the high incidence of strikes in the mining industry in recent years. They conclude, and I quote:

Changes in both structure and process are shown to have potential for reducing the number of conflict situations that arise. For these changes to come about, institutional innovations are required. . . .

Later in the same section, these words occur:

Information obtained from both unions and mining firms suggests that little effort is being made to bring these changes about. Innovations in labour relations, such as worker participation through works councils . . . , are viewed with suspicion by management and unions alike.

The authors appear to be of the view that the establishment of works councils would serve to moderate the 'adversary' attitude and thus create a climate in which it would be possible to resolve labour disputes without strikes or lockouts. Undoubtedly, their thinking in this regard has been influenced by the experience in Europe, and this suggests that we should examine the role of works councils in European industry. I have selected Germany for this examination because works councils have been used extensively in that country over a long period of time.

The first point to be noted is that in Germany, as in most other European countries, trade unions operate at the industry level rather than at the company or plant level. They bargain with industry associations, and the bargaining is generally confined to direct monetary benefits such as rates of pay. Works councils first came into being at the company or plant level, to provide employees with some degree of participation in matters affecting their employment at those levels. The councils are elected bodies representing all employees and not just employees who are members of the union. They deal with a wide range of matters which are not covered by the industry-wide collective bargaining agreement, such as hiring, reclassifications, transfers, technological change, contracting out, and dismissals. In the case of dismissals, the works councils must be informed before every dismissal. They can veto a dismissal under certain circumstances, in which case management may

have recourse to a labour court which makes the final decision. The councils also have wide responsibilities in the field of welfare. However, it is interesting to note that in the area of economic decisions, the role of works councils is purely an advisory one. While the employer is required to inform the works council about commercial and financial matters affecting the company, the power of decision in these areas is still vested in the company and its management.

The development in Canada has been quite different. The first significant difference is that collective bargaining agreements are at the company or plant level. The second significant difference lies in the fact that the scope of collective bargaining agreements has been greatly enlarged in recent years. Such agreements now include a full range of welfare programs which formerly were not included in collective bargaining agreements. They also contain specific provisions relating to such matters as technological change and contracting out. Many agreements provide for various kinds of committees. For example, in the case of the Iron Ore Company of Canada, the current collective bargaining agreement at Labrador City provides for committees on health and safety, contracting out, vacation scheduling, grievances, cooperative wage study, and overtime distribution and scheduling. We also have two other committees which are not provided for specifically in the collective bargaining agreement, one being an area problem committee, and the other an apprentice training committee.

Even in those cases where the employee's off-the-job interests are not covered by the collective bargaining agreement, the union usually still plays an active role. This is particularly true in the mining industry. For example, while housing policy may not be covered formally in a collective agreement, the union usually has a voice in the determination of such policy. In short, the union in many cases regards itself as the chief spokesman for all of the employees' concerns, both on and off the job. This all-embracing character of the union's activity is obviously why, in the words of the authors of the study: 'Indeed, union leaders appear to be content with the present relationship, for the reason that it meets the needs of their members.'

IMPROVEMENTS IN EMPLOYER-EMPLOYEE RELATIONSHIPS

It would be unrealistic to expect Canadian unions to agree to any plan of restructuring employer-employee relations which would diminish the role of the unions. Given this situation, it is not surprising that management does not look with any enthusiasm on the establishment of additional structures for employer-employee relations, such as works councils which would duplicate, and undoubtedly complicate, the present employer-employee relationship. This suggests to me that we should direct our efforts to improving the present structure for handling employer-employee relations, and not to developing new structures for that relationship. This exercise will certainly call on all of our innovative resources and I have one or two observations to make in that regard.

Communications

My first observation concerns the need for better communication between the company and its employees, and I mean two-way communication. This, undoubtedly, is of critical importance during the bargaining process but it is perhaps of greater importance in the day to day relationship. The MacMillan study contains some interesting statistics relating to the increase in the level of education in the mining industry. These show that, over the 20-year period 1951 to 1971 inclusive, the percentage of persons employed by the mining industry with less than a grade 9 education decreased from 52 percent to 37 percent. In the same period, the percentage of those with educational levels between grade 9 and grade 13 increased from 30 percent to 51 percent. (University, 7.2 percent to 11.3 percent.) This increase can be attributed to the increasing complexity of mining operations and the resulting demand for a higher level of education in the work force.

I am sure a better educated work force has contributed to improved productivity, but I am equally certain that it has affected the attitude of the employee to management. I think it can be argued that it has also changed the attitude of the employee to his union. The present generation of employee does not subscribe to Tennyson's well known couplet: 'theirs is not to reason why, theirs is but to do or die.' They tend to question both the decisions of management and the proposals of the union. If a satisfactory explanation is not forthcoming, they will frequently fail to respond to management's directives and they may also reject the proposals of their union. In these circumstances, the feeling of job satisfaction, which the study correctly emphasizes as an essential element in employer-employee relations, is bound to be affected. The problem is basically one of communication. It is paradoxical that in a period when the techniques for communicating have been so highly developed, the problem of poor communications is still prevalent, particularly in employer-employee relations.

Some years ago, the Iron Ore Company of Canada engaged a reputable consulting firm to make an enquiry into employer-employee relations. The exercise was carried out with the full cooperation of all of the company's employees and unions. It consisted, in the first instance, of an interview with a representative group of employees totalling 500 in number, or approximately 7 percent of the total work force. As a result of the information gleaned in the interviews, a long questionnaire was sent to each employee. The answers were summarized and analyzed by the consultants and an analysis and summary were sent to every employee. The dominant fact which emerged from the answers to the questionnaire was the lack of communication with the company at every level. Management has endeavoured to remedy this situation in a number of ways, including the use of joint committees, but I would be less than honest if I told you that we had succeeded fully in solving the communications problem. I would hope that, during this seminar, there would be some discussion of the communications problem which, in my opinion, is at the root of most of our difficulties in industrial relations.

Collective Bargaining Process

My second observation is directly related to the communications problem as it affects the collective bargaining process. However, first, I would like to comment on this word 'adversary' which figures so prominently in the chapter in the study dealing with industrial relations. To the extent that an adversary attitude results in illegalities such as wildcat strikes and violence, I would agree that it is a bad thing and we should make every endeavour to eliminate it. However, I would point out that the adversary concept is present in some degree in every bargaining process, whether it be in industrial relations or in the market place. The parties rarely arrive at the bargaining table with the same idea of what constitutes a bargain. Consequently, they tend to take positions which they realize will have to be modified if a bargain is to be reached. However, if bargaining is to be successful, there must be some degree of realism in the initial demands.

I spent my boyhood in a small village on the north shore of Lake Superior, which, by today's standards, was quite remote from the large centres of population. One of the great events of the year was the arrival of Eaton's Catalogue, and we spent many hours deciding which of the many goodies offered in it we would like to have. It seems to me that this catalogue approach to the formulation of employee demands has become the common practice. As a result, the initial demands presented at the bargaining table are frequently quite unrealistic, and this is generally understood by both parties. As a bargaining ploy, this approach may have its value, but it runs the risk of raising expectations in the membership ranks which the union cannot possibly satisfy. In my own experience, this is frequently the reason why the membership will reject a settlement submitted to it by the bargaining committee.

It seems to me, however, that if the union is to do its part in screening the initial demands of its membership, it is essential that the employee should have a better understanding of his role in the production process and its impact on the company's financial and competitive position. He can only have this understanding if there is an effective two-way communication system in place. While management must be responsible for initiating such a system, it will only work with the active cooperation of the employee and his union. My view of the importance of communication is predicated on the basic assumption that the employee understands that his welfare is inextricably bound up with that of the company. It is generally agreed, I think, that the economic system under which we live has produced a very high standard of living and an equally high degree of personal freedom compared to those prevailing in other systems. However, if the system is to continue to work, all of those who benefit from it must recognize its constraints. If a company is to maintain its ability to provide high levels of compensation and to provide good working conditions, it must also maintain its ability to compete in its markets. This is especially true of the mining industry, which must sell the major part of its production in highly competitive international markets. If, on the other hand, we cannot agree on the basic assumptions underlying our economic system, then no

amount of improvement or restructuring will solve the current problem of employer-employee relations. We will have moved from the area of industrial relations into the political arena.

Ratification Procedure

My third observation concerns the ratification procedure. It is now the general practice that any proposed settlement must be submitted to the entire membership for ratification. I have considerable sympathy with the union bargaining team which, under this arrangement, is constantly confronted with the prospect of an adverse vote, particularly when the proposed settlement falls short of the expectations created by the initial demands. This ratification procedure also has an inhibiting effect on management, simply because management is reluctant to put forward a final position, particularly in the early stages of bargaining. In these circumstances, the bargaining process can be a long drawn-out affair and this, in my opinion, rarely contributes to a final settlement. Is it too late to return to the practice previously followed in some unions, of giving the bargaining team full powers to bargain and settle? I certainly think it is an idea worth exploring.

Settlement Procedure

My fourth observation concerns possible improvements to the bargaining process where the parties have bargained in good faith but where a settlement cannot be reached. Binding arbitration presents one avenue of approach, but binding arbitration has not been widely used in Canada in the private sector. As we well know, it has been used in the public sector where governments, generally through legislative action, have imposed a settlement. Such settlements have rarely been acceptable to either party. Would it be possible to adopt a procedure which would be a blend of the two elements: bargaining, and some form of voluntary binding arbitration? I am thinking here of the experimental negotiation agreement in effect in the United States between the United Steelworkers and the major steel companies. Under this arrangement, the parties have agreed to a deadline for bargaining, the deadline being fixed on a date several months prior to the expiry of the current agreement. As a starting point in the bargaining, the parties have agreed to a floor with respect to rate increases. If no agreement has been reached by the date of the deadline, the issues, with the exception of local issues, are referred to a five-man board of arbitration. The board consists of three outside members acceptable to both parties and one union and one industry representative. The findings of the board are binding on both parties. The experimental negotiation agreement has been in effect since 1973 and it is significant to note that two three-year contracts have been settled without recourse to arbitration.

A second approach which has been discussed, but thus far has had only a limited application in the USA, is what is called the 'final offer selection'. Under this arrangement, the parties are required at a certain period in the bargaining process

to submit a 'last best offer' to an impartial panel which can choose only one of the two offers. It has been argued in support of this method that, when the parties are faced with a settlement based on one or other of the two last final offers, they will make every effort to submit a realistic last offer. It forces both parties to narrow their differences during the bargaining process in order to convince the panel that both final offers are reasonable. It avoids the situation which often occurs in binding arbitration where the arbitrator has latitude to dictate the final terms and as a consequence, the parties at the bargaining table take extreme positions in the expectation that the arbitrator will split the difference.

In conclusion, may I point out that these several observations as to how we might improve the collective bargaining process reflect no doctrinaire position on my part, but rather the pragmatic approach with which we, in Canada, generally solve our problems. It is in this context that I invite your critical examination and discussion.



FLY-IN PROGRAM AT RABBIT LAKE

by

F.R. Nogas and J.P. Fulcher

INTRODUCTION

Gulf Minerals Canada Limited operates a uranium mine and processing mill in the Wollaston Lake region of Saskatchewan. Approximately 290 employees are on the payroll at the present time. The uranium deposit was discovered in 1969, and initial indications were that the ore body would sustain ten to twelve years of production. The ore is hauled from the open pit mine to a mill that processes 2,000 tons of ore per day. The product, yellow cake, is a semirefined uranium concentrate containing about 80 percent uranium oxide. It is shipped to the Eldorado conversion plant in Ontario for further processing. The project headquarters, including accounting, purchasing, and administration, are located in Saskatoon.

STAFFING PROBLEM

The Rabbit Lake Mine, in common with other northern mining enterprises, faced a difficult problem in the recruitment of an adequate work force. A study by The Mining Association of Canada had looked at the increasing scarcity of mineworkers, and indicated that this could become a limiting factor in the growth of the mining industry. Surveys conducted by the mining industry also indicated that the number of skilled and unskilled workers willing to take jobs at Canadian mines was dwindling and the situation was reaching a critical stage. Manpower and Immigration Department statistics showed that the number of hourly-rated workers at mines across Canada declined to 78,000 in 1973 from 79,400 in 1972.

High turnover has aggravated the problem of manpower shortages. The estimated turnover rate per mine fluctuates from less than 25 percent to about 400 percent in some instances. Turnover of personnel was identified with and influenced by:

- i) the remoteness of mine and townsite;
- ii) traditional high mobility of mine workers; and
- iii) the high cost of living in these isolated communities.

The indigenous population of the Rabbit Lake area is limited to the residents of a small Indian reservation, none of whom have any industrial skills or experience. Larger native settlements in the vicinity of La Ronge, Stony Rapids and Uranium City have high rates of unemployment, but there is generally a lack of suitable training or experience in an industrial environment. A real concern for us was to provide opportunities for northern native employees, without disrupting their traditional life styles. Our preliminary discussions with the various band councils indicated that it would be very difficult to sever their members from their band and council and reservation ties.

OBJECTIVES

Concern over the problems of staffing the Rabbit Lake facility for the expected ten years of production led Gulf to establish certain objectives in the process of selecting a 'life style' for employees. First, we wanted to minimize the factors creating negative attitudes toward employment in remote areas. Secondly, we wanted to establish an effective employee relations program. To this end, we spent a great deal of time visiting companies that we felt had excellent programs and were having a fair amount of success in achieving job satisfaction and good rates of retention. A third objective, as I have mentioned, was the provision of job opportunities for northern native employees. A fourth objective, in view of the relatively short life span, was to have a very flexible program that would minimize the disruptions resulting from the eventual shut-down of the mine.

ALTERNATIVES

Company Town

Our first consideration was the development of a new community and to this end we engaged the services of a planning consulting firm to develop plans for a townsite. These plans were complemented by a study of basic urban design characteristics and requirements for a new mining community in an isolated area. The latter study was conducted by an architectural consultant.

These studies involved the development of a typical, small mining community in which employees can live with their families, and which provides those necessary facilities

and amenities which would be found in centres of similar size. This community would have a total population of approximately 900, with a minimum infrastructure, 200 miles from the closest community to the south.

We also sought the advice and counsel of individuals in government and industry who could relate to similar developments.

From the academic world, we found a wealth of information from various research studies of northern communities, in particular those conducted by the Centre for Settlement Studies at the University of Manitoba. Some of the more interesting observations and comments indicated that there were over 200 similar settlements north of the Canadian agricultural zone classed as single-enterprise communities.

Under normal conditions, a town's livelihood may be extended or revitalized as other sources of employment are developed. However, economic and other conditions in most parts of the Canadian north are not 'normal'. The prospects for diversifying the economic base of most mining towns are quite limited and, in certain cases, almost impossible. As a consequence, a large number of such communities have never recovered from the decline or collapse of their sole industry and have become ghost towns; all that remains of their once thriving and hopeful past are empty buildings, broken windows and gutted streets. As is well known, the costs of ghost towns — to the private developer, the provincial government, and the workers and families living in these communities — are enormous.

The single-enterprise community, based on the extraction of a remote resource, is not the result of natural socio-economic forces in community formation and growth. It violates the traditional urban development process, of gradual growth from hamlet to town and city status, along well-travelled transportation routes. It is not uncommon for this type of community to 'boom' into existence in a matter of a few months, nor has it been uncommon for such a community to die out equally as fast.

The stress symptoms of isolated northern Canadian community residents most frequently referred to in the literature and spoken about in conversations among northerners included:

- i) mental health problems, especially depression
- ii) alcoholism and drunkenness
- iii) extreme loneliness
- iv) feelings of insecurity and uncertainty
- v) 'cabin fever' (also called 'crowding').

The school situation, we found, would depend on the policy of the Department of Education, especially regarding the provision of grades. Very often in smaller and remote communities the department considers that the number of pupils

(especially in grades 10, 11 and 12) is not adequate to provide the necessary number of teachers, nor the necessary auxiliary rooms and facilities. In terms of stability of the labour force, this could be a very important decision, because parents will often move away from isolated towns if the school facilities are not adequate, or, as is sometimes the case, are nonexistent beyond certain grades.

Fly-In Program

In view of problems associated with company towns, Gulf decided to consider a practice common in remote oil and gas areas in the Arctic and in offshore drilling operations, the 'fly-in' concept.

This alternative involved the design of a program which provides on-site accommodation for employees *only*, and an air shuttle service to move personnel in and out from their homes in such established communities as Saskatoon, Prince Albert, La Ronge, Uranium City, Fond du Lac, Stony Rapids, and Black Lake.

It was obvious from our studies that the success of this project would be highly dependent upon our ability to recruit and maintain a competent and stable work force.

It also appeared from our studies that the traditional modes of providing accommodation and employee relations practices at a mine/mill complex in a remote area present numerous problems and that an innovative approach would have to be developed to satisfy today's employee needs in their quest for a more suitable quality of life.

In order to meet our objectives, the emphasis in the fly-in program had to be placed on the following:

- i) minimizing those factors which create negative attitudes toward employment in remote areas, as the rate of turnover of the work force is directly proportionate to the negative aspects in the quality of life
- ii) developing an effective employee relations program which would include an above-average compensation package, superior accommodation, a safe and healthy work environment, and opportunity to develop employee skills and knowledge
- iii) providing the opportunities for native employees to be trained, and offering them meaningful and challenging work — integrating the natives into the work environment with a minimum disruption to their traditional lifestyle, which emphasizes strong family, band, and reservation ties
- iv) attracting and holding a competent and relatively stable work force
- v) recognizing the eventual problems associated with a mine having a relatively short life span.

ATTITUDE SURVEY

Before deciding between the alternatives, Gulf engaged a firm of professional attitude and opinion surveyors, who interviewed samples of prospective employees and their wives from the southern population centres and collected the following types of information:

- i) past experience of participants and/or families with company towns, labour camps, shift work and isolated communities
- ii) reasons for labour going to isolated communities — the influence of money, type of work, employment conditions, isolation, community of interests and lack of alternative employment
- iii) attitudes toward: housing quality and availability; recreational, educational and cultural facilities; transportation, shopping, media, postal and communications facilities; employment of wives and teenage children; and medical and dental facilities.

Company Towns

There seemed to be two general attitudes, both mainly negative. There was a feeling among many of them that a town that was totally controlled by one company left them with the feeling of 'big brother' watching over them. In a company town, residents were not able to associate with anyone except those who worked at the same place they did, and would be afraid to do or say anything out of line. They felt that the company store took back the money paid to them, and the same would apply to the housing. Many others felt that the living costs in a company town would be high, so although the wages were perhaps higher, the cost of living was accordingly higher.

The other attitude was that mining towns were inclined to be rough places, with a lot of drinking and gambling, due to the preponderance of young single men or transients. Some of the women expressed the feeling that a company or a mining town, specifically, was no place to bring up a family.

Fly-In Program

The farther north the community, the more positive the attitude toward the fly-in concept. Most of the women surveyed in Prince Albert, for example, thought it would be a very good thing and preferred this concept to a company town, at least in the initial years of the mine's operation. They could not see any problem with this kind of scheme offering permanent employment, nor in obtaining staff who would be willing to work on a permanent basis.

The survey concluded that the 'fly-in' concept was entirely practicable and that the requirement of a satisfactory and comparatively stable work force could be achieved.

IMPLEMENTATION OF THE PROGRAM

In examining the capital and operating costs of building a townsite as compared to the cost involved in the 'fly-in' concept of providing accommodation, food and transportation, the company found that, over the projected 10- to 12-year period, the latter would be more expensive.

Nevertheless, after considering in detail the economics, staffing problems confronting the production facility and social problems confronting the personnel, the decision was to opt for the 'fly-in' program.

A comprehensive communication package was developed, outlining the details of the Rabbit Lake operation and the actual conditions to be offered on the site. Recruiting efforts were concentrated in the Saskatoon, Prince Albert, La Ronge, Stoney Rapids and Uranium City areas during the last quarter of 1974 for start-up early in 1975.

- . All employees, with the exception of certain supervisory personnel and those assigned to the Saskatoon office, were put on 7-days-in 7-days-out schedule, working 11 hours per day. The annual work schedule comprises 23 weeks (161 shifts or 1,771 hours) worked, 23 weeks of scheduled time off and a total of 6 weeks of combined annual vacation and general holidays.
- . On-site employees are provided with private, single-room accommodation in motel-type units, with all meals provided by the company in a central dining hall. A commissary and dispensing machines are available for snacks.
- . Recreation facilities include table tennis, pool table, shuffleboard, darts, and an exercise area. There is also a movie theatre and a licensed club operated by the employees.
- . Medical assistance is provided by a registered nurse on site.

At Rabbit Lake there are two runways, with a beacon and VHF radio communications. The aircraft are 40 passenger turboprops, on charter from Norcanair, a Class A carrier. Regular airbus commuter service, four times weekly, is provided between the mine site and Saskatoon, Prince Albert, La Ronge, Stoney Rapids, Fond du Lac, and Uranium City. Flight delays or cancellations due to weather have been negligible, averaging less than 1 percent per year. When a flight is cancelled, as has happened about three times in the last three years, the workers due to fly out continue working.

HOW IS IT WORKING?

Some problems have emerged during the course of operation, including the fear of flying, the separation of workers from their families for seven days at a time,

and the short contact-time as crews are changed. All of these problems are being dealt with through communications programs.

For the fear of flying, the first and obvious approach is to recruit workers who are not afraid to fly. To help those who develop the fear while employed, Gulf has instituted meetings at which the air charter personnel have an opportunity to explain safety features of the aircraft, the communications equipment, and the landing strips.

The problem of family separation is more complex, but has been approached in a similar manner. In the course of recruitment, the wives are interviewed as well, to ensure that they understand and feel competent to cope with the responsibilities of running the household during the seven-day absences of their husbands. In order to give dependents an idea of the working conditions and surroundings at the mine site, Gulf has prepared a video-tape presentation on the fly-in program and the mining operation. Furthermore, every Christmas, weather permitting, dependents of mill workers are flown to the mine-site for a Christmas party, giving them an opportunity to see where it is their husbands or fathers disappear to, every other week.

The problem of on-site communication is critical, with crews crossing paths with their cross-shifts for only about one hour. This is all the time available for briefings on events of the previous week and plans for the coming week. The problem is alleviated considerably by the fact that the 7-day shifts overlap. In addition, continuity in supervision is achieved by flexibility of scheduling and duplication of some positions.

Although it may take months or even years to evaluate the program fully, we feel that it is practicable, is working well, and is meeting the needs of the enterprise and of employees, both those from urban areas, and those from remote northern communities.

We have been fortunate, through selective recruiting, in attracting an unusually competent work force with good morale and have experienced relatively low turnover (28 percent in 1975, and down to 16 percent in 1978) compared to similar operations.

Employees are given opportunities to utilize their initiative, knowledge and skills. The mine and mill personnel are trained to operate the various types of equipment through on-the-job instruction and practical experience. Maintenance personnel are given an opportunity to develop multi-craft skills, hence broadening their total job knowledge and increasing their flexibility. As an employee's job skills increase, his achievements are recognized by progressive salary increases.

We continue to receive a positive reaction to the fly-in program from both existing and prospective employees. In particular, it has been well received in the northern communities, because it provides their residents with an opportunity for

regular employment while allowing them to maintain their present place of residence and carry on in their traditional life-style, including hunting, fishing and trapping.

LEAF RAPIDS: A REAPPRAISAL AND COST ANALYSIS

by

W.F. Clarke

INTRODUCTION

In order to save the valuable time of the participants in the seminar and leave more time for questions and discussion, a paper entitled 'Planning and Construction of Leaf Rapids - A New Town With a New Concept' (see appendix I) and a brochure entitled 'Leaf Rapids Manitoba - A Bold New Concept for Community Development' were mailed to you by Peter Richardson some weeks ago as background reading material. Therefore, in this paper, it is assumed that you are familiar with the facts and information contained in that material.

From the company's point of view, Leaf Rapids was built in order that Sherritt would have an efficient, loyal, contented, and stable workforce to man its Ruttan Mine. This paper is an attempt to give an assessment of Leaf Rapids' success to date in meeting these goals, what the capital costs were, and Sherritt's present operating cost per man hour worked. Also included is Sherritt's assessment of what it would have planned differently, in light of the past four years' experience.

There are constructive criticisms contained herein, made in good faith and included so future planners of new towns in remote areas may take note, and learn from our experience. Despite these criticisms we wish to assure you on behalf of Sherritt that we and the majority of the citizens are justifiably proud of their town.

To bring you up to date:

- 1) At the time the first paper was written, the price of copper was C \$1.40/lb.;

shortly thereafter it dropped fairly rapidly and reached a low of C 0.52¢/lb., necessitating a re-evaluation of the feasibility of proceeding with the development of the underground mine at the Ruttan operation. Therefore, it was deemed prudent to halt any further expansion of the housing in Leaf Rapids until a reassessment was made.

- ii) During the 4-year period 1974-78, the cost of construction more than doubled. Therefore, any figures for construction costs given in this paper should be multiplied by 2.5 to produce a realistic replacement cost.
- iii) A firm decision to go ahead with the development of the underground mine was made about 15 months ago.
- iv) After this decision was made and activated, it was realized that we should proceed with the expansion of housing at Leaf as per the original plan. We are now faced with the problem of how to make affordable, acceptable housing available to those employees not as yet housed on the townsite.

The appended paper mentions the disagreements and the differences of opinion between Sherritt and the government's planners. The three most contentious were:

- i) the ratio between single family housing and multiple rental units
 - Sherritt: 70 percent single family units
30 percent multiple rental units
 - Government: 30 percent single family units
70 percent multiple rental units
- ii) zoning
 - Sherritt: no R1 zoning
 - Government: first 3 bays all R1, with only single family units
- iii) town centre
 - Sherritt: an open square, with separate buildings for a school, recreation facilities, municipal offices, health care facilities, plus land for a shopping mall and at least six acres open for private entrepreneurs to build whatever additional facilities the townspeople were willing to support
 - Government: unibuilding town centre with facilities for school, shopping, hotel, municipal government, recreation, health care etc., all under one roof. The government also overruled the plan to set aside 6 acres for private development.

COST OF LEAF RAPIDS TOWNSITE

Housing

The unit and total cost for various types of dwelling units are shown in table 1, and table 2 shows the sources of funds for housing.

Table 1

COST OF HOUSING

Ownership	Type	No. of Units	Cost of Single Unit (\$)	Total Cost (\$)
Private	Single family	198	26,000	5,148,000
Private	Duplex	67	40,000	2,680,000
Private	Mobile home	35	15,000	525,000
Private	Mobile home	41	20,000	820,000
Private	Mobile home land development			492,000
Private	Total			9,665,000
MHRC ^a	Apartments	72	18,000	1,296,000
MHRC	Townhouses	119	23,888	2,842,000
MHRC	Total			4,138,000
Total townsite housing cost				13,803,000

^aManitoba Housing and Renewal Corporation

Table 2

SOURCES OF FUNDS FOR HOUSING TO 1978

Source	Type of Funding	Amount (\$)
Sherritt	Second mortgage	2,625,000
Sherritt	First mortgage (trailers)	820,000
Sherritt	CMHC for 10 years ^a	4,400,000
Sherritt	Total	8,337,000
CMHC	First mortgage (MHRC rental units)	3,724,000
MHRC	Investment rental units	414,000
Other ^b		1,328,000
		13,803,000

^aSherritt guaranteed first mortgage loans.^bIncluding owners' equity.

As nearly as we can estimate, the 2.5-times factor will have to be used to duplicate in 1979 the housing costs shown in table 1. There are sixty-two 60' x 100' developed vacant lots on the townsite, which became available during the summer of 1975. These have not been used because of the freeze on further expenditures, due initially to low copper prices, and later to the high cost of construction.

The only accommodation provided by Sherritt since 1974 has been the forty-one 14' x 70' mobile homes and the mobile home park lots that we have recently made available to our employees. Mobile home park lots 45' x 102' cost \$12,000 each and are rented for approximately \$45 a month including municipal taxes on building. Mobile homes are owned by the employee, with the company making a substantial first mortgage loan.

Infrastructure

Table 3

TOWNSITE INFRASTRUCTURE COSTS (*\$ Thousand*)

Water and sewage systems	2,066	
Streets, curb, and paving	701	
Public works garage	146	
Public works equipment	390	
Public safety building	475	
Municipal office ^a	184	
Recreation centre, arena, curling rink, ½ gym, ½ library, ½ multi-purpose room ^a	1,631	
School including balance of gym, library, and multi-purpose room ^a	2,213	
Theatre ^a	213	
Health centre ^a	742	
Exhibition centre ^a	133	
Retail shops, Town Centre ^a	1,463	
Hotel ^a	1,784	
Town Centre Mall ^a	940	
Provincial offices ^a	269	
Paving paid by provincial grant	335	
Operating cost town during no tax period	365	
Land including other undistributed development cost	4,363	
Infrastructure total cost		18,413
Less Town Centre		9,572
Balance		8,841

^aCharged to Town Centre.

Table 4

SOURCES OF FUNDS FOR TOWNSITE INFRASTRUCTURE
(\$ Thousand)

Sherritt - Total	\$ 7,439
Other Leaf Rapids taxpayers (net)	403
Leaf Rapids Corp. - repayable from rentals	4,187
Estimated land sales	2,356
Government of Canada - Exhibition Centre	133
Government of Manitoba	3,895
Total	\$18,413

Costs of Production (Including Townsite Costs)

We have given you our capital cost for the townsite, and now we would like to give you our cost per person hour worked. Before giving you these figures, I would like to make this comment. The base metal mining industry for many years paid top wages. However, with the depressed state of base metals, the industry has not been able to keep up with their more fortunate competitors for skilled labour in other segments of the mining industry, other resource industry, as well as industry in general, particularly construction. Some, of course, do not have to include the kind of fringe benefits that must be provided in remote areas. Table 5 shows the combined cost of wages plus these benefits per man-hour worked, and table 6 breaks down the bunkhouse and townsite costs. These figures indicate that it costs as much to house employees as it does to provide all other fringe benefits: those we are obligated to pay by law, those we provide under our Union contract to hourly paid employees, and those we chose to give to our staff.

Table 5

TOTAL COST PER MAN HOUR WORKED

Camp and townsite average cost	\$ 2.49
Cost of fringe benefits - 27 percent of \$8.37 (estimated)	2.26
Estimated average wage rate for total workforce ^a	8.37
Estimated total average cost per hour	\$13.12

^aIncluding hourly rated and staff.

Table 6

BUNKHOUSE AND TOWNSITE COSTS, PER MAN HOUR WORKED

Bunkhouse subsidy:	\$ 1.90	
Townsite subsidy:		
Per man-hour worked	\$ 2.01 ^a	\$ 1.46 ^b
Transportation	0.23	0.22
Housing subsidy - 11 percent interest on mortgage loan capital	0.45	0.60
Present cost	2.69	2.28

^aSubsidy per man-hour worked, if 75 percent of workforce on townsite.

^bIf all employees on townsite.

SUCCESS OF LEAF RAPIDSRecruitment and Turnover

Sherritt's first priority was to attract a sufficient number of employees from its Lynn and Fox operations to assure us of a solid core of trained, loyal, efficient employees, who would bring to and establish in Leaf Rapids and at the Ruttan Mine the same highly desirable relationships, attitudes, and atmosphere which had been brought from Sherridon to Lynn Lake and to the Fox Mine. Unfortunately, Leaf Rapids did not attract even 25 percent of our target figure.

Probable reasons for this failure include:

- i) radically different townsite design
- ii) Leaf Rapids Development Corporation control (i.e. government control)
- iii) available work in the Lynn and Fox Mine kept workers where they had their roots down. Had there been no jobs at the Lynn Mine, the employees might have moved as a group, thereby bringing most of their roots with them. However, this could only have been accomplished had single family housing been available at a reasonable cost for each employee.

The second priority was to attract and hold efficient, skilled, and desirable employees. As of November 1978, there were 715 employees on the Ruttan payroll. Total turnover for the period January 1 to October 31, 1978 was 33.4 percent, and we estimate that it will reach 36 percent by December 31, 1978. The absentee rate is 5.44 percent, for all factors except annual vacation. Employee retention figures for the Ruttan Mine, in terms of number of years of service, are shown in table 7.

Table 7

EMPLOYEE RETENTION, RUTTAN MINE

Years of Service	Retention (Percent)
1 or more	70 ^a
2 or more	52
3 or more	36
4 or more	27
5 or more	20

^a30 percent of employees have been with the company less than one year.

Now let us look at the relation between the type of housing and employee turnover in table 8.

Table 8

TYPE OF HOUSING AND TURNOVER

Type of Housing	No. of Units	No. of Employees in Housing Units as:		Percent of Workforce	Turnover in 1978 (Percent)
Single family and duplex	342	Owners	310	43	10
Apartments and townhouses	258	Tenants	231	32	30
Bunkhouse accommodation		Boarders	174	25	60

It is fairly obvious from the above figures that our turnover rate is fairly good. However, it indicates that to minimize turnover all employees should be living on the townsite, and more owner occupied single family housing units should be available. We have an interesting example of the benefits of readily available, affordable, single family housing in Lynn Lake. The turnover rate at the Fox Mine and Divisional Headquarters' staff, based at Lynn, with all of these employees living on the Lynn townsite, is 1.5 percent per month (18 percent for the past 12 months). This can be compared with the figure of 50 percent per year, prior to the Lynn Mine shutdown, when about 40 percent of the workforce lived in bunkhouses.

Productivity

This year the Leaf Rapids workforce is mining an average of 33,000 tons and milling 10,000 tons per day from the open pit, at an average of 9.75 tons per man hour (or if figured on tons milled, 2.6 tons per man hour). In the first nine months of 1978, 510 employees chargeable to the open pit operation milled and mined 1,926,000 tons of ore and 5,260,000 tons of waste. The balance of the workforce is working on underground development.

Production today is a function of the operators' skilled use of machines plus the availability of machines, which in turn requires the services of increasingly skilled tradesmen. Training and retention are the necessary ingredients for increased productivity. The majority of those who remain with us are married and raising a family; to them, job satisfaction and family satisfaction with quality of life are most important.

Sherritt is proud of its present Ruttan workforce, their productivity (considering the circumstances of cold, isolation, the size of the pit), their skills, and the resultant machine availability, which have made these tons per man hour possible.

ALTERNATIVES CONSIDERED

We have been asked whether we considered alternate ways of manning Ruttan. The answer would have to be a qualified yes. For example, we considered expanding the Lynn Lake townsite in order to:

- i) bus crews in and out after each shift (2 hours each way: cost of travel time excessive)
- ii) work three 12-hour shifts one week, four 12-hour shifts the next week, with free travel plus free room and board. Efficiency would be poor and turnover high
- iii) work five 8-hour shifts per week, with workers returning home only on weekends. This works for a short period, and retention is very poor
- iv) fly in and out after each shift. Cost would be very high and weather conditions four months of the year are very uncertain
- v) use fast hovercraft transportation: the state of the art was not advanced enough at that time.

Lynn Lake would have had to be more than doubled in size for this approach, and the attendant costs would have been high.

A second approach considered by Sherritt was a fly-in scheme. We had tried this in a small way, with native people from their homes in the reservations and settlements, by float and ski plane. Weather, absenteeism, and 9-days-in 9-days-out schedule led to a complete failure of the program. No consideration, that I know of, was given to an extensive fly-in program such as Gulf Minerals has established for their Rabbit Lake Mine.

Having had the experience of the past five years under our belt, the knowledge of the success of Gulf's program, the extent of our ore bodies, and knowing what the average actual price of copper and zinc would be during the years 1974 to 1978, would we have taken the same route? Hindsight is a great thing. Our answer is, YES, we would. We would hope that any government would have realized, from the same five years' experience, that our plan was better than theirs. We have a real bargain at today's prices in our beautiful town of Leaf Rapids. Sure, there are a lot of things wrong and needed, but there is nothing that cannot be fixed with time and money.

RECOMMENDATIONS

Housing

On the basis of our experience, we recommend that all employees should live on the townsite. Furthermore, the kind of housing preferred is owner occupied single family housing units.

Unibuilding

The unibuilding town centre cost \$700,000 more than all the rest of the infrastructure combined. It cost as much as the investment in private housing, and more than double the amount the government invested in rental housing. These ratios will change as the town grows and more housing units are added. The town centre won the Governor General's Award for Excellency in urban design, and it is indeed a beautiful building and a source of considerable civic pride. However, DON'T build another one without taking the following points under consideration.

- i) Should the school be included?
- ii) Should there be a double gym, or one for the school and one multipurpose gym for the town with a stage, large kitchen facilities, etc?
- iii) Should the curling rink be included or should it be in a private membership owned building with club rooms, bar, and plenty of spectator space?
- iv) Should the hotel be owned and operated by a hotel chain and should it be in a separate building, if it has a beverage room?
- v) Does the building design have enough storage space?
- vi) Is there any saving in maintenance and heating cost by putting everything under one roof?
- vii) Do you need serviced land adjacent to your unibuilding to provide:
 - a) for expansion of the number of retail outlets, creating competition and therefore greater variety in shopping
 - b) encouragement for private enterprise to fill the need for pay-as-you-go recreation, bowling alleys, pool room, theatre, etc.
 - c) adjacent land for churches, day care centres and club buildings, etc?

Recruitment

We recommend careful study of the type of people, who, after their initial exposure to the climatic conditions, isolation, and close-to-nature life, remain to make it their permanent home and are satisfied with the quality of life available. Are they the type of people who:

- a) are bothered by the cold weather
- b) would like to go to the same place all the time for social activities, shopping etc.
- c) would get claustrophobia in a unibuilding complex
- d) like to camp, ski, etc. and generally enjoy the outdoors
- e) are somewhat shy and may need places, sports activities, and recreational facilities where they can mix informally?

We think more studies should be sponsored by the mining associations in Canada, to give their member mining companies an idea of what type of employee should be hired to man remote operations, and which life style these employees prefer.

APPENDIX

LEAF RAPIDS DEVELOPMENT

W.F. Clarke, Personnel and Industrial Relations Manager,
Sherritt Gordon Mines Limited,
Lynn Lake, Manitoba

(Reprinted from The Canadian Mining and Metallurgical Bulletin, April, 1975.)

Sherritt Gordon Mines Limited is no stranger to northern Manitoba. It has been discovering, developing and operating mines north of 54 in Manitoba for the past 45 years. In connection with the development and operation of these mines, Sherritt, of necessity, has had to develop townsites to accommodate its work forces.

It all started back in 1927 with the development of an orebody located on the shores of Cold Lake, approximately 45 miles northeast of the then developing town of Flin Flon. The original settlement at Cold Lake had started as a drill camp, the haphazard growth of which, without company control, was unacceptable to Sherritt. This necessitated Sherritt building a company town about one mile from the settlement of Cold Lake in order that its employees might enjoy the benefits of a well-planned and orderly community. The company planned, built, paid for and operated the town of Sherridon from 1928 until 1952, except for the seven years between 1930 and 1937. When copper reached a low of 5 cents per pound, the mine had to be temporarily shut down.

Sherridon became famous as the town that moved over the ice on winter roads to our developing nickel mine 125 miles to the north, where it formed the nucleus of the townsite now known as Lynn Lake within the Local Government District of Lynn Lake. This move was made in 1951 and 1952, at which time the depleted Sherridon mining operation was phased out and the Lynn nickel mines were activated to the production stage. The population is 3,400.

Lynn Lake was the first Local Government District established in Manitoba as the end result of an agreement reached between the government and Sherritt. Under this agreement, Sherritt was obligated to pay for all capital expenses necessary for the development of the townsite, that is, the sewer and water systems, roads, lanes, power distribution system, hospital, school and recreational facilities, and for this consideration was absolved from municipal taxes. However, it was obligated to pay a head tax of \$120 per year to the Local Government District for each employee resident on the townsite. The mine site, its buildings and bunk-houses were excluded from the townsite. Sherritt has followed a 'hands-off' policy in the administration of the Local Government District of Lynn Lake.

When the Fox Mine was discovered 30 miles to the southwest of the Lynn operation, the company considered that it would be most advisable to have these employees reside on the Lynn townsite, rather than build a new small townsite to accommodate the Fox employees and their families. This would give the company the opportunity of providing more sophisticated and improved facilities than would have been possible with two separate and much smaller townsites. Therefore, the townsite of Lynn Lake was expanded to accommodate the increase in numbers of employees required for the Fox Mine.

Employees are bussed 30 miles over a paved road at the beginning and end of each shift. It is interesting to note that, both at Sherridon and at Lynn Lake, all of the housing was of the single-family unit type. However, with the advent of the Fox Mine, the company constructed several small apartment blocks, which were to be owned by its employees, and latterly a private developer developed a 21-suite townhouse complex and two 12-suite apartment blocks for rental to Sherritt employees.

Several months before the Fox Mine was in operation, the orebodies which subsequently became the Ruttan Mine were discovered. This was in April of 1969. It was immediately decided that it would not be feasible to use the Lynn townsite for the employees who would be hired or transferred to man the Ruttan Mine, as it was 85 miles southeast of Lynn Lake.

Sherritt immediately selected a possible site for a new town, located two miles south of the Churchill River Narrows above Leaf Rapids, approximately 64 miles southeast of Lynn Lake. This site, 15 miles directly west of the orebody, had been formed by a wide glacial sand esker and, after investigation, proved to be the only feasible site of sufficient size within computing distance of the 'about-to-be' developed mine.

Preliminary feasibility studies of the Ruttan orebody showed that full production could commence by July 1, 1973. With a serious shortage of trained manpower and changing conditions as to the mobility of work forces, it was deemed essential that the townsite be developed as quickly as feasible in order that the percentage of married men be as high as possible.

A major policy decision was arrived at by the company in that it was felt that the best method of developing a townsite was to negotiate with a proven major subdivision developer. To this end, discussions took place with Ladco Company Limited, with whom the company had previous experience in the development of the required housing during the expansion of the Lynn Lake townsite caused when the Fox Mine started. Ladco had successfully developed three major subdivisions in Winnipeg, namely, Windsor Park, Southdale and Fort Richmond. On the advice of the Ladco executives, David G. Henderson, who had previously been the chief municipal planner for the Province of Manitoba and who is now the environmental commissioner for the City of Winnipeg, was retained as town planner. W.L. Wardrop & Associates Ltd. were

retained as the town's engineering design consultants, and Webb and Webster, Manitoba Land Surveyors, were to advise on the proposed townsite.

Mr. Henderson was asked to plan a townsite retaining most of the natural park-like environment of the site in such a manner as to accommodate a total population of approximately 3,500. It would be built on that portion of the esker which lay to the east of Highway 391, with housing, commercial and recreational facilities to the south of the main access road, and the heavy commercial and industrial sites on the north side of this road. The design should most desirably accommodate 600 single-family units on 60- by 100-ft building lots and enough multiple unit areas to accommodate 300 family units. The town should be designed to be completely electric, with all wiring buried. The town centre should be within walking distance of all residential accommodation and in a complex which would include separate buildings, some of which would be connected by tunnels or covered walks. This town centre would include town offices, hospital, school, recreation facilities, hotel and retail facilities.

After preliminary drawings and estimates were made by W.L. Wardrop & Associates on the initial plans as drawn up by Mr. Henderson, Sherritt submitted its basic concept to the Manitoba Government through Premier Schreyer in December of 1970. Premier Schreyer immediately advised that the government wished to develop the townsite itself, but would accept the proposed site and the basic concepts, and would retain the services of W.L. Wardrop & Associates Ltd. as town engineering design consultants: however, the government wished to have the planning done by a subcommittee of the Planning and Priorities Committee of Cabinet.

The government would cause to be incorporated a wholly-owned subsidiary of the Manitoba Development Corporation, which is a Provincial Crown Corporation. The Leaf Rapids Development Corporation was delegated the responsibility for building the townsite as prescribed by the aforementioned sub-committee of the Planning and Priorities Committee of Cabinet and was also responsible for executing, on behalf of the government, the terms of the agreement to be arrived at between the province and Sherritt.

Protracted negotiations then started. The end result of the negotiations was that the government, through the Leaf Rapids Corporation, would assume responsibility for developing the land and the infrastructure for the townsite, including the town offices, hospital, school, recreational facilities, retail commercial facilities, hotel, safety, and municipal maintenance garages. As well, it would take the responsibility for the development of housing on the townsite.

The original concept of 70 percent single, 30 percent multiple family units had been changed by this time by the government planners to 30 percent single family and 70 percent multiple family units, which change was a subject of bitter disagreement between the parties and, to date, has not been finally resolved. In-

dications are that it is, as the company predicted, the desire of its employees to live in single-family units. However, the planning has restricted the availability of single unit lots within the perimeter of the townsite, which, in turn, has caused delays in making this type of accommodation available.

A mutually satisfactory agreement was arrived at on April 16, 1971. The primary concern of both the company and the province, in reaching agreement, was to provide for the residents of the town a most desirable place in which to live at a cost which they could afford. The company, on its part, insisted that:

- i) municipal taxes should not exceed \$450 per year on a \$24,000 single-family unit;
- ii) land costs should not exceed \$60 per frontage foot to the buyer;
- iii) single-family lots should not be less than 6,000 square feet, with an average 60-foot frontage.

One of the most difficult problems to overcome was how to fulfill the company's condition in item i, above, on municipal taxes. The solution finally arrived at was that the tax base had to be broadened and the government persuaded the company to allow its concentrator and surface shops on the mine site to be assessed on a fixed assessment basis in order to provide a sufficiently broad municipal tax base. As well as agreeing to this assessment, the company further agreed to pay for certain facilities by having the cost of these facilities amortized over a twenty-year period, payment to be made by the company by a special municipal tax levy and the cost of development of the townsite and infrastructure to be distributed as follows:

LEAF RAPIDS AGREEMENT COST SHARING

Item	Land Sale	L.G.D. ^a Taxes	Sherritt Gordon	Province
Water supply			X	
Water distribution	X			
Sewage collection	X			
Sewage disposal			X	
Gravel roads and drainage	X			
Pavement		X		
Sidewalks and street lighting	X			
Municipal buildings and equipment		X		
Community recreation centre			X	
Medical		X 20%		X 80%
School				X

^aLocal Government District.

A delay in the start of construction was incurred due to the extensive replanning done by the Planning Subcommittee of the Planning and Priorities Committee of Cabinet. Therefore, construction, which was to have started in May, did not commence until the latter part of August, 1971, and fell further and further behind schedule because of the severe climatic conditions experienced in a winter building program. A further problem was that severe transportation difficulties had to be overcome due to the fact that everything had to be hauled over a development railroad, then transferred to trucks to be hauled over 60 miles of under-construction development highway. To further complicate the problem, it should be remembered that the materials for the development of the mine site were being transported over these facilities at the same time.

The town centre complex was delayed for approximately a year and a half due to the replanning and the government's decision to have a uni-building town centre. In the meantime, temporary school facilities, shopping and service facilities were provided by the Leaf Rapids Corporation. The townspeople, during this period and up to the end of 1974, have not paid any municipal taxes, as the company, during the pioneer stage in 1971, 1972 and 1973, agreed to pick up the operating costs of the Local Government District as a capital expense to be repaid over a twenty-year amortization period, similar to the manner in which it is paying its share of other expenses incurred as a result of the agreement.



THE CYPRUS ANVIL REPORT TO EMPLOYEES

by

Selwyn B. Jones

Annual and interim reports to shareholders are a legal requirement. Their essential purpose is to enable the shareholder to assess the value of his investment and the effectiveness of management in enhancing that investment. How much more concerned is the employee in *his* investment? His time, his abilities, and in some cases his entire working life are invested in his company. His lifestyle, his ambitions, and the well being of his family are all intimately related to the affairs of his employer. His concern and interest in those affairs, which so directly affect his life and that of his family, cannot be denied and should not be underestimated. He wishes to assess *his* investment. He too needs to know!

To meet this need, preparation of the first Cyprus Anvil Mining Corporation *Report to Employees* began in October, 1977. It was distributed to the 550 employees of Cyprus Anvil in February, 1978.

Steps had been taken in 1976 to increase employee awareness of the affairs of the company through distribution of shareholder reports. At that time, however, the employees had other concerns which were much more immediate. An organization known as the Anti-Inflation Board had reduced a recently negotiated 36 percent wage increase down to 10 percent. In July of 1976, following a period of intermittent work stoppages, the unionized employees in Faro went on strike — against the A.I.B., not against the company — and remained on strike for four and a half months. Communication under these circumstances proved very difficult. Following the return to work in late 1976, operations were seriously hampered for several months due to the need to replace workers who had left during the strike. However,

there were no further work stoppages and efforts were again directed toward improving communications.

To add to our own assessment of the situation, an independent consultant was commissioned to visit Faro and to report objectively on his impressions of the main problem areas. His report said in part: 'Almost without exception, those that I talked to said they did not feel that they understood what the company's future plans were. That does not necessarily mean that they did not receive information. But it came through clearly that they did not have an understanding of the company's future thinking and how it affects them. There is no doubt they want to know.'

This became the main thrust of the first report to employees. Objectives were clearly defined; financial information was simplified as much as possible; every attempt was made to use nontechnical language that was easily understandable. Each successive draft was scrutinized by each executive as well as by any management personnel whose departments were mentioned in the report. No commitments were made without first ensuring that they could, in fact, be fulfilled. There would be no false promises. The report stresses a basic philosophy: from the President of the company to the Labourer in the mine, all are employees of the company; each individual contribution is necessary to the company's success; all are working to a common purpose.

To encourage two-way communication, which was the ultimate goal, questionnaires were enclosed with the reports, offering an opportunity to the employees to recommend ways in which they felt communication could be improved. Space was also provided to express opinion on any specific area of concern to the individual. Most of the replies were objective, and revealed that a nucleus of employees recognized the communication problem and were prepared to support the initiative. The number of replies, though small, encourages us to expect a much greater response to our next effort. Every suggestion was followed up and, if practicable, implemented. Every signed response was acknowledged and subsequently answered in a personal letter from the President, after a full enquiry into the matters raised by the respondent.

Following the first *Report to Employees*, and as an integral part of the overall communication program, interim reports have been issued to the employees each quarter. Thus far, the interim reports have been in the form of a letter from the President, but we are presently studying the types of information which would be of most interest and greatest use to the employees in gauging the effectiveness of their own contribution to the company. Future reports may take the form of comparative departmental production and cost reports, and safety and labour turnover statistics.

The greatest concern in opening up the lines of communication had been the maint-

enance of a regular flow of accurate information from the company. Regularity and consistency are essential factors in an effective program. This first report was a learning experience which will help us to do better next time. The importance of any initiative lies less in its first faltering steps than its translation into a firm program and in the momentum which it generates.

We are confident that the philosophy which underlies the *Report to Employees* is sound. We feel that it will gain growing acceptance in a society which is becoming more and more aware of the desire for employee participation in the affairs of their companies, particularly in those aspects which directly affect job security, training and advancement. This participation is vital to an efficient and uninterrupted production process.

In the mining industry in particular, with operations located in remote and sometimes inaccessible areas, and where mine-life is often of relatively short duration, the employer must provide as great an opportunity as possible for the diligent worker to enjoy job satisfaction and job security. In Cyprus Anvil, this concern for our employees is embodied in one of the four company responsibilities.

Those four responsibilities, to digress for a moment, are contained in the *Report to Employees*, and are as follows:

- i) to our employees
 - to provide safe and pleasant working conditions
 - to provide wages and benefits that are among the best, in relation to our competitive position, productivity, and profitability
 - to provide opportunities for job and career advancement and fulfilment
- ii) to our shareholders
 - to protect their investment
 - to provide a good rate of return
 - to seek opportunities to increase the value of their investment
- iii) to the communities where we operate
 - to understand their needs and goals and to work in unison with them
- iv) to our customers
 - to identify and meet their needs.

The future of Cyprus Anvil is predicated on those four responsibilities. We believe that in fulfilling them the company will generate the goodwill and cooperation of those to whom they are directed. Only in an environment of mutual responsibility can we achieve the goals that will ultimately benefit all those who are directly or indirectly affected by our company.

Can the philosophy of mutual responsibility override the adversary nature of company/employee relations which has developed over the years? It is our belief that it not only can — it must! It will not happen overnight; it may not prevail

in this century. But a journey of a thousand miles begins with one short step. Cyprus Anvil is taking that first step. We live in a society which has become increasingly defensive of 'rights' and infinitely less aggressive in demanding 'responsibility' in exercising them. We must, all of us, come to the recognition that rights and responsibilities go hand in hand: that every benefit brings a burden. As a society, we have become attuned to a chorus of rights: provincial rights, management rights, 'gay' rights, employee rights, and even children's rights. Rarely do we hear the word 'responsibility'. Our company has elected to take an initiative in a small, localized way toward solution of this problem.

Our philosophy of mutual responsibility is founded on a basic premise: that the large majority of people truly prefer cooperation to confrontation. There are risks involved in adopting this philosophy, not the least of which is the risk of being misread or misunderstood. Nevertheless, we are hopeful that more and more of our employees will enter into this joint endeavour and that it will be mutually beneficial and individually rewarding.

We intend to continue the program of communication because we deem it a responsibility to do so. It is our belief that, with increased knowledge of company affairs and greater involvement in the decisions which affect their jobs, employees will become more concerned with the difficulties which face their company. The problems facing the employer may be quite different in character from those of the employee, yet each problem bears upon the ultimate success of the company, and each must be resolved. This goal can be accomplished only through closer communication between all levels of the organization.

We have been asked how the Union fits into this initiative. What part will it play? It would require more time than I have available to relate the history of labour relations in Faro. It would take even longer to discuss the reasons for the truly hostile climate which existed in 1975. Suffice it to say that Faro had the air of a besieged town, even before the A.I.B. added fuel to the fire. It is neither my wish nor my intent to discuss the factors which contributed to the almost untenable situation other than to say that neither management nor union can claim to have been blameless.

This then was the situation when, in 1975, as the result of the amalgamation of Anvil Mining Corporation and Dynasty Explorations Ltd. into Cyprus Anvil Mining Corporation, a new management group was formed, headed by Mr. John Bruk. From this point onwards the philosophy I have earlier outlined was adopted. The first step was to establish common ground and a common purpose. Every effort was made to increase the awareness of every member of the organization, management, non-unionized staff and unionized workers, that all were employees of the same company, and that only if the company as a whole were successful could individual aspirations be fulfilled. It was a slow painstaking process, demanding a basic change in attitudes. On the practical side, we did as much as possible to improve facilities

in the town of Faro itself, in order that the quality of life be enhanced as much as is possible in an isolated community. Substantial capital programs were also undertaken to improve working conditions at the minesite.

The impression which these efforts, both philosophical and practical, have made on our employees is clearly evidenced in the fact that our company has experienced a reduction in turnover (see table 1) and no work stoppages since the major strike in 1976. It also clearly demonstrates that the union has responded to our initiative in a truly responsible manner. The part which the union will play in the continuing program of mutual responsibility will become clear as time progresses. Ours is an organic approach to development. Rather than stipulate that either management or union shall do 'thus' or 'so', we believe that the greatest good will come from the interplay of ideas and concepts from both union and management. The union has already contributed in no small measure to our progress to date. Thus far we have union representation (equal representation, in most cases) on committees which consider such matters as safety, housing, drug and alcohol abuse, pension funds, security fund investment, hiring policies, training, and apprenticeship. With such a broad range of participation, our unionized employees play a significant role in decisions concerning their working environment and job security.

Table 1

CYPRUS ANVIL LABOUR TURNOVER STATISTICS 1974 - 1978
(As Percent of Total Work Force)

Kind of Employment	1974	1975	1976	1977	1978 ^a
Hourly:					
Mine	109.1	82.6	69.7	47.0	41.5
Mill	101.4	71.9	65.2	60.6	35.7
Service	83.0	46.0	50.3	22.5	18.0
Salaried	65.3	39.7	31.3	29.0	23.8
Total plant	92.2	64.0	57.6	40.2	31.6

^aNine months, to September, 1978.

In the final analysis, however, job security is predicated upon an efficient and profitable company, able to compete in international markets: efficient to the extent that productivity at least equals that of producers in other parts of the world where labour costs are much lower than they are in Canada; profitable to

ensure that funds are available to develop new mines as existing ore bodies are exhausted, thus ensuring continuity of employment. We anticipate that our employees, both union and non-union, will recognize this challenge and respond to it in a positive way.

What we have tried to accomplish is to create an environment in which ideas and suggestions from every source — union, employees and management — can be freely expressed and knowledgeably appraised. When each listens to the other with a receptive ear in recognition of a common purpose, we shall have achieved our goal.

EMPLOYEE RELATIONS AT THE KIDD CREEK OPERATIONS OF TEXASGULF LIMITED

by

T.F. Cawsey and P.R. Richardson

INTRODUCTION

'Kidd Creek is a good place to work.' This was a typical response from operators interviewed during a visit to Texasgulf's Kidd Creek mine and metallurgical complex near Timmins, Ontario.* The operations have won the John T. Ryan trophy for the last three years, having experienced the lowest accident frequency of any Canadian mine. Labour turnover and absenteeism are low compared to other mining operations, and managers maintain that productivity consistently meets the goals of the company.

At Kidd Creek, Texasgulf has a comprehensive and internally consistent employee relations program. Senior managers emphasize the importance of communication with the work force, and ensure that this communication is facilitated by competent, well-trained supervision. However, according to one senior manager: 'The key to the entire program is attitude.'

Both operator and supervisory attitudes are carefully monitored, and are seen as important indicators of the management-operator relationship. Other important elements in the program are concern for the welfare of employees, salaries (rather

* The research was made possible by the cooperation of employees of Texasgulf Canada Limited.

than wages) and associated benefits for all employees, and the opportunity to have an ownership stake in the company.

Both management and operators appear to view the program as a success. This paper describes the program, and attempts to show why this success has come about. Nevertheless, problems do exist and these will be discussed. Finally, we will show how similar schemes could be adopted by other companies.

COMPANY BACKGROUND

Texas Gulf Sulphur Incorporated was originally formed to produce sulphur for agricultural and industrial uses. From the firm's inception, it adopted a policy of providing employees with a level of benefits designed to eliminate any need for unionization.

Texasgulf has been able not only to provide these benefits, but also to ensure that employees are never subjected to lay-offs. As a result, none of the company's operations has been organized.¹

After the second world war, the corporation started a program of diversification away from sulphur products into other natural resource industries. Exploration for minerals in the Canadian shield was considered as early as 1952. Aerial exploration commenced in 1959 and early in the program a magnetic anomaly (denoting the existence of a mineral deposit) was recorded around Kidd Creek, 15 miles north of Timmins. Following extensive drilling, the existence of the Kidd Creek ore body was announced in 1964. Construction of facilities for an open pit mine began in 1965, and by 1967 a mine and concentrator were in full operation. The mill building was located 17 miles east of Timmins, and was connected to the mine by a railroad.²

A second phase of construction started in 1969, when development of an underground mine and building of a zinc plant commenced. These operations came into production during 1972, at which time the permanent work force of the operation increased from approximately 900 to 1,700. A third construction phase was underway during 1978 as a mine expansion program necessitated the sinking of a new shaft and the building of a copper smelter at the metallurgical site. These projects were delayed by the company because of weak markets for zinc and copper, the two major products of the operation. However, they are expected to be completed in the near future. By 1978, the total work force numbered 2,100, of which 1,000 were employed at the mine site and the remainder in the metallurgical complex.

1. Ascertained from company records.

2. Clarke, P.R., 'The Ecstall Story - Introduction', *CIN Bulletin*, May 1974, vol. 67, no. 745, pp. 3-5.

At the end of 1977, reserves at Kidd Creek were estimated at 119 million tons, of which 108.3 million were classified as proven and probable containing an estimated 2.84 percent copper, 0.18 percent lead, 5.03 percent zinc, and 1.99 ounces of silver per ton. At current rates of production an operating life of 30 years is assured.³ However, the limits of the ore body have not yet been ascertained, so it is probable that this is a minimum estimate of the life of the mine. The growth of operations at Kidd Creek and the security of a long life and rich ore body have both had significant impacts on employee relations.

Because of the high degree of mechanization of the mine and metallurgical plant at Kidd Creek, efficiency of the operations is largely process controlled. Individual employees have relatively little influence on the rate of production. However, the operators do have significant impact on the effectiveness of the operation, as they control sophisticated and costly process equipment. Poor utilization could lead to a significant increase in operating costs.

THE EMPLOYEE RELATIONS SCHEME AT KIDD CREEK⁴

The employee relations scheme is intended to provide two major benefits to the company. First, the object is to motivate employees to operate in a way that maximizes company profits in the long run. As one manager commented: 'We want operators to feel that it's their job and their company.' Accordingly, as well as a share in company profits, the company offers job security to satisfactory employees. Secondly, by providing operators with benefits that eliminate the need for unionization, the firm aims to increase the flexibility of supervisors in making operating decisions. Superintendents stated that they felt able to make decisions without having to consider if they were setting precedents. In return, the corporation attends to the safety and concerns of all employees on an individual basis.

The management at Kidd Creek has modified the worldwide Texasgulf program to meet the unique needs of their operation. At present there are five major elements:

- i) management attitudes towards the workforce
- ii) executive visibility and communication
- iii) the salary and benefit package
- iv) bonuses
- v) attitude surveys.

However, the program is dynamic and adapts to changes in the environment and the workforce. Accordingly, the elements described below have been put together over a number of years, and will probably be modified in the future.

3. Texasgulf Incorporated, *Annual Report*, 1977.

4. Grenville, D.F., 'The Employee Relations Department', *CIN Bulletin*, May 1974, vol. 67, no. 745, pp. 89-94.

Management Attitudes Towards the Workforce

Members of the senior management at Kidd Creek believe that their attitudes towards the employees form the cornerstone of a successful program. They devote a great deal of energy to ensuring that employees are treated as individuals. This philosophy views individuals as adults who deserve to be treated accordingly. It has led to a significant level of openness, trust and camaraderie between organization members. These values pervade the organization and individuals accept them quickly. There seems to be significant peer group pressure to adopt these values, and individuals who resist this process generally leave Texasgulf of their own volition.

Treatment as an adult comes about in many ways at Kidd Creek. Individuals are given significant responsibilities and expected to meet them. All employees are salaried and when an employee is sick or late he is treated in a manner which relies on his integrity. Management understands and accepts the right of the employee to have needs which differ from those of the company. Furthermore, the fulfillment of job-related needs is perceived to be important (thus safety in the work place becomes a prime concern).

Senior managers at Kidd Creek believe that this philosophy must be reflected in the attitude of first line supervision. Consequently, considerable care is taken in the selection and training of shift foremen. They are usually chosen from within the workforce, so that they are already imbued with the attitudes and values that pervade the operation. Assessment centres are used to identify individuals with high potential, and once selected, new supervisors are given a course on the Neil George Safety system, as well as a one week American Management Association supervisory training course.

The responsibilities and authority of first line supervisors are clearly defined. Within these limits they are granted complete autonomy of decision making. Senior managers allow that mistakes will be made in the exercise of judgement, but tolerance of such errors is viewed as a part of supervisory development. This deliberate delegation of decision making is consistent with the overall view of the individual adopted by company management. Thus, while supervisors are restricted in areas of discipline (e.g. control of firing is the general manager's responsibility), they have direct responsibility for the organization, operation, and safety of their work group.

Policies exist which direct first line supervisors to place individual safety above all other considerations. In posted minutes of monthly crew meetings, supervisors could be seen to be stressing safe practice, sometimes at the expense of production. As one supervisor put it: 'If I don't care about the safety of an individual, I don't care about the person.'

Along with this concern for individual safety, there is evident concern about the

overall welfare of operators. Job security is accepted by management as an issue to be dealt with carefully. While first line supervisors must approve of any new employee in their own crew, they are not allowed to dismiss subordinates. Supervisors are encouraged to understand and work with operators who are not performing adequately, and operators who abuse work rules can be suspended by their supervisor without pay. However, the supervisor must prove his case to the management group. Dismissal is seen to be a last resort, and has to be approved by the general manager of the Kidd Creek operation.

Supervisors are well-rewarded financially. There is a significant salary differential between them and other employees. As well, they can earn overtime pay. However, because of the key role the first line supervisor plays in the Texasgulf employee relations program, the job has not developed into a sinecure.

The demands on and management expectations from supervisors are considerable. At times, some do not perform adequately, even with the training and guidance provided. When this occurs, they are moved to less critical positions. As one superintendant pointed out:

In most mines the supervisory group is stable, and there is high turnover among the operators. At Kidd Creek turnover rate among supervision may be high also. This care for the quality of our supervisors helps to convince operators that we are serious about employee relations.

Although first line supervisors are encouraged to identify with the problems of their crew, they feel that they are part of the management team. Accordingly, although performance requirements are high, the social and financial benefits ensure that the position is viewed as desirable for ambitious operators.

Executive Visibility and Communication

The Kidd Creek operations operate on a first-name basis throughout. Executives are visible, and make frequent visits to working places. The chairman of the corporate board visits the operation between two and six times each year. The president, located in Stanford, Connecticut, makes regular visits to the operation and attempts to attend the annual picnic.

A formal grievance procedure exists, with grievances usually passing through an operator's immediate superior. Nevertheless, employees can take questions, problems, and grievances directly to executives at the operations, or even to the president of the company. A 'hot-line' telephone number for this purpose is conspicuous on most notice boards throughout the operation.

Employee meetings held in company time play an important role in communications. Monthly crew meetings are held by each first line supervisor to discuss safety, company news, and his crew's own problems. Minutes of these meetings are posted

on bulletin boards, and also widely circulated. The general manager reads all of them, and will investigate a persistent problem that does not appear to have been resolved. He follows up on one or two issues per week which arise from these minutes. Supervisory personnel have their own monthly meetings in which current concerns are voiced, plans are discussed, and the company's management philosophy is reinforced.

All employees are invited to semiannual general meetings. Senior corporation executives attend, talk about important company news, respond to questions, and afterwards meet with employees for informal discussion. Executives also attend the employees' annual picnic.

The Salary and Benefit Package

All Texasgulf employees are salaried. However, this fact is not seen by the company to be important for its own sake. Rather, there are significant benefits to both employees and the company from the salary system. Managers note that they probably spend more time on employee relations concerns than if the operation were unionized. However, this time is not spent in unproductive bargaining sessions.

Annual salary increases are determined by Texasgulf's board, based on recommendations from operating management. Consequently, high performance can be recognized through merit increases, a feature which is difficult to implement within a collective bargaining framework. A basic cost of living increase forms part of the annual salary review. However, clerical, technical, and supervisory personnel receive individual merit awards, while production and maintenance staff receive group merit awards.

Texasgulf maintains a comprehensive benefits plan including medical and dental benefits, life and accident insurance, retirement plans, as well as other benefits for leaves of absence, educational assistance, and the employee share ownership plan. Management believes that one purpose of the benefits plan is to treat everyone equally (except for salary). Employees perceive one of the most important benefits to be the medical plan provided in the case of sickness. Full salary is received from the first day of illness or injury for six months, at which time a long-term disability program comes into effect. Medical notification of illness is not required for the first three days. In spite of this freedom, absenteeism is not a problem, averaging only about 3 percent annually. Employees appear to avoid abuse of this privilege, for fear of losing it. For many years Texasgulf has maintained a benefits package which was superior to most other companies, although recently this competitive edge has eroded somewhat.

Bonuses

The share ownership scheme apparently reinforces the perception among employees

that they have a stake in the company. On the first anniversary of employment, one share of stock is received by each employee. On the fifth anniversary, a further five shares are awarded; thereafter, every five years, employees receive one share of stock for each year of employment. Employees do not feel that they work any harder because of these awards. In fact, some of the younger employees tended to regard their one share (approximate value of \$30.00 Canadian) with some disdain. However, employees approaching ten or fifteen years with the company look forward to these awards. Few employees sell their shares, but instead keep them as some small capital for the future.

No individual incentive schemes are maintained by the corporation. This reinforces the emphasis on safety before production. For instance, unlike other metal mines in Canada, Kidd Creek has no mining bonus. Instead, an annual bonus is awarded to all employees. The amount of the bonus is determined by the board of directors, and each individual receives an amount proportional to his annual salary. The bonus is intended to reflect the performance of the firm during the preceding year. Because of the cyclical nature of markets for Texasgulf's products, the bonus cannot be directly proportional to profitability as this depends to a great extent on prices beyond the control of the company and its employees. However, the employee still knows that his bonus is related to the company's performance.

There is also a safety bonus awarded to Kidd Creek employees. For every 100,000 hours worked by each crew without a lost time accident, prizes are awarded. These are distributed monthly, and are usually items such as work gloves and dance tickets. Supervisors commented that as a crew neared the required total of hours, tension became apparent, and there would be general disappointment if a lost time accident occurred. Operators viewed the bonus as further evidence of management's concern for safety.

Attitude Surveys

Management remains in communication with the workforce through a variety of informal mechanisms. In addition, formal attitude surveys, on a number of general and company specific indicators, are taken periodically across the entire workforce, covering the fifteen general items listed in appendix I. A modified form of the survey is administered to supervisory personnel.

The survey provides information on attitudes which can be directly compared with norms for other companies in which the general survey is administered. One drawback to this comparison is that these companies are not Canadian and not in mining, so there is no indication as to how the attitudes at Kidd Creek compare to those in other mining and metallurgical operations in Canada. However, some idea of trends in attitudes can be drawn from a historical analysis, by comparing data from past surveys at Kidd Creek.

The surveys complement informal means of gathering data on employee attitudes, and provide information on key areas of management concern. They may provide concrete evidence to support managements beliefs on what is occurring in particular departments. They occasionally provide the basis for changes in employee relations policies. For instance, one survey indicated that there was substantial dissatisfaction with the informal grievance procedure then in effect. Consequently, after a management study of the problem, a more formal, clearly defined system was introduced.

RESULTS TO DATE

Since many of the benefits from the employee relations program are intangible, it is difficult to attribute to it specific cost savings. However, a number of operating measures provide company management with justification for claiming that they have been successful.

The safety record of operations at Kidd Creek in recent years is approximately ten times better than the average for other Ontario metal mines. Table 1 shows a comparison of the frequency of workers' injuries per million man-hours worked. Although the accident rate increased during the workforce expansion in 1972 and 1973, Texasgulf's record was still far superior to the average of other Ontario metal mines. There has never been a fatality in the Kidd Creek underground mine.

Labour turnover and absenteeism are low, and retention of employees is high. Table 2 shows turnover rates from 1966 to 1977. Although no recent figures are available for Canadian metal mining in general, two points are of interest. First, in 1973 and 1974, while turnover in the industry exceeded 100 percent at some mines,⁵ rates at Kidd Creek remained around 15 percent per annum. Secondly, informal enquiries indicate that labour turnover in 1977 was around 33 percent annually for some large Ontario mines, while that for Texasgulf dipped to 10 percent.

Of 678 employees hired by the company in 1966 and 1967, 371 were still with the company in early 1977. Absenteeism rates, as indicated earlier, averaged around 3 percent until 1972 and 4.5 percent since then. Low turnover and high retention result in employees who know the operation and are consequently less likely to have accidents. They also have a considerable degree of commitment to the organization. Because of the constant expansion, the age profile of the workforce almost guarantees years of stability in the future.

The productivity question is a more difficult issue to judge. Although exact figures are not available, and comparisons with other metal mines are difficult, the management at Kidd Creek state that productivity not only meets their own

5. Cawsey, T.F., and P.R. Richardson, 'A Study of Labour Turnover in the Canadian Mineral Industries', carried out on behalf of The Mining Association of Canada, London, Ontario, 1975.

Table 1

ACCIDENT FREQUENCY COMPARISON

	Man-Hours	Injuries	Texasgulf Frequency	Average Frequency Ontario Mines
1967	1,320,944	17	12.8	38
1968	1,422,039	6	4.2	37
1969	1,554,985	2	1.2	40
1970	1,835,043	6	3.2	40
1971	2,084,043	8	3.8	39
1972	3,062,353	17	5.6	39
1973	3,469,742	28	7.8	35
1974	3,728,437	18	4.8	47
1975	4,249,330	28	6.6	54
1976	4,736,225	28	5.9	57
1977	4,867,679	31	6.4	52

Source: Mining Accident Prevention Association of Ontario Annual Report.

Table 2

 TURNOVER STATISTICS
 (Percent)

	Turnover Rate
1966	10.15
1967	25.0
1968	5.7
1969	5.5
1970	5.3
1971	5.4
1972	12.0
1973	15.0
1974	16.8
1975	12.7
1976	10.0
1977	6.5

Source: Company records.

^aTurnover is determined by summing all terminations and quitings in the year.

targets, but compares favourably with the rest of the industry. Since the operation is process controlled, productivity depends upon a workforce that is 'on the job', with no disruptions due to labour disputes. Texasgulf, with its excellent employee relations, has had no such major conflicts. A second benefit of good labour relations is the absence of rigid job descriptions, seniority requirements, and other artificial barriers to flexibility.

Interviews carried out in the operations with a cross section of the workforce support the statistical evidence produced above. With few exceptions, operators expressed satisfaction with their jobs and the company. Morale appeared high, and people seemed happy to take a few moments to talk. In response to a question about an apparently slow work rate, one employee responded:

Activities tend to be well planned, so there's not the constant panic or pressure that seems to exist at other operations. However, when a job needs to be done urgently, we do it and quickly.

This kind of statement was made several times, and gave evidence of a substantial degree of trust in supervision and management.

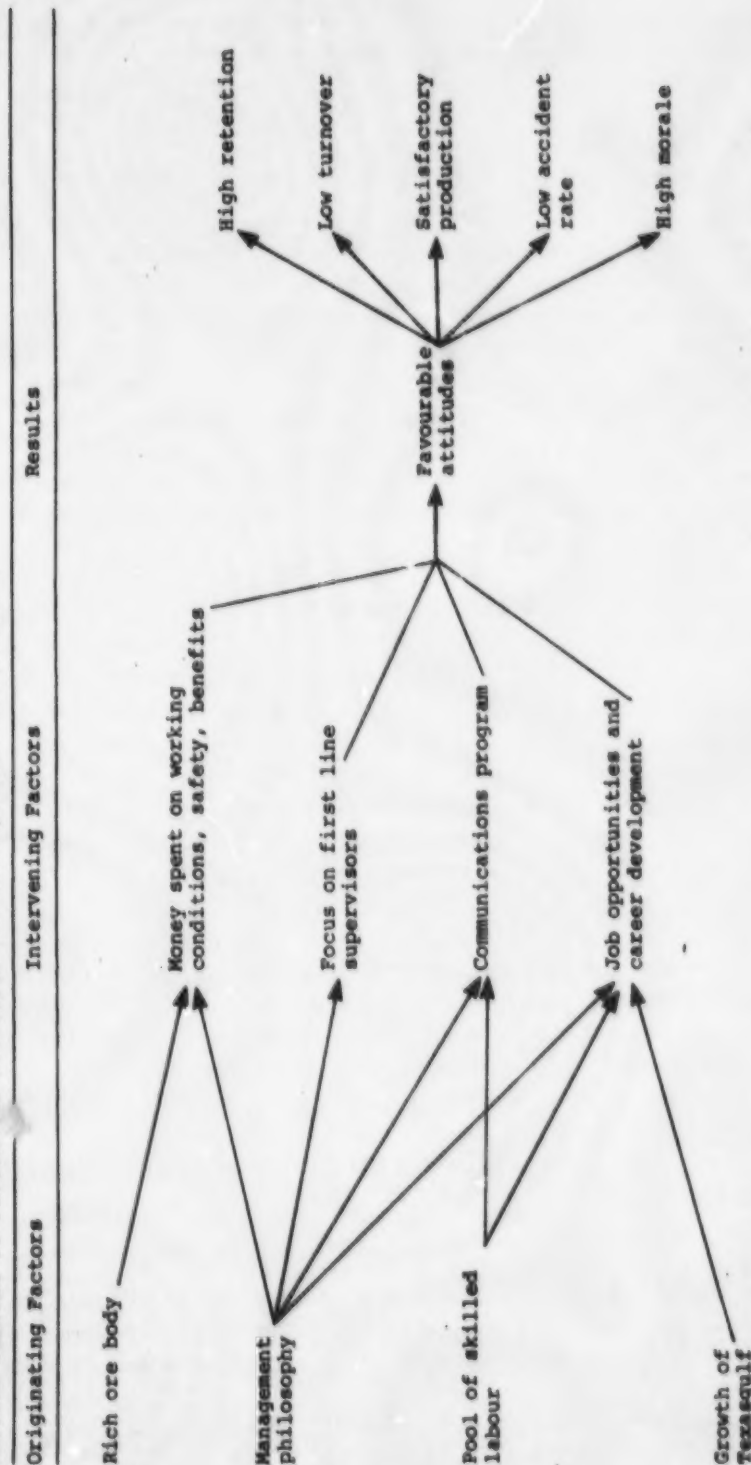
WHY HAS THE PROGRAM BEEN SUCCESSFUL?

The employee relations scheme at Kidd Creek has benefited from several favourable underlying factors. First, the operation is located near Timmins, the centre of one of Ontario's largest gold mining districts. When Kidd Creek opened, the gold mines were declining, and wage rates were depressed. Consequently, prospective employees perceived an opportunity for higher income, job security, and good working conditions. As a result, the operation drew upon a large pool of skilled, relatively stable labour. Furthermore, because of the high grade deposit, the company could afford to invest heavily in equipment and facilities that would provide good working conditions for employees. For instance, underground rest-rooms are painted, contain flush toilets, and have both hot and cold running water. These facilities are not found at many other mines in the area. For a number of years, the operations were constantly growing and changing. Consequently, there were always developments to keep employees interested, and expansion created new job opportunities for career development. However, these factors alone do not explain the exceptional operating results described above.

We believe that the most important factor in the program's success has been the attitude of management and supervision. All other factors can be related to this factor. As a result of management attitudes and philosophy, money was spent to improve working conditions, the benefits package was established, and the focus was put on first line supervision. These factors led to favourable attitudes on the part of employees, and subsequently to the impressive results which have been outlined. Table 3 details the actions leading to these results.

Table 3

FACTORS LEADING TO FAVOURABLE ATTITUDES AND CONSEQUENCES AT TEXASGULF



The underlying management philosophy at Kidd Creek is a belief in a rational, rather than authoritarian, style of management. Executives believe in the worth of individuals. As one manager puts it:

Executives believe that operators can be motivated to do a good job by aligning their interests with those of the company. This depends on high levels of trust and communication within the company.

If this trust were to be lost, the program would falter. Accordingly, management policies ensure complete fairness in dealings with individuals. For example, the firing of an employee is seen as a last resort and, as mentioned earlier, only the general manager has this authority. Furthermore, the program is not intended to 'keep the union out'. This motive would be perceived negatively by workers, with the attendant consequences. Instead, the purpose of the scheme is to treat the human resources of the operation in the way management believes individuals should be and want to be treated. Concern for the safety and careers of individuals are hallmarks of Texasgulf. To some, this statement might sound like a platitude. We believe it reflects enlightened management appropriate to a skilled and loyal workforce.

A second important factor in the program's success is the satisfaction which people achieve. Herzberg identified two types of influence on human behaviour: hygiene factors, and motivating factors.⁶ Hygiene factors will not motivate people to do a good job, but must be satisfied before motivating factors can be effective. Hygiene factors can play a major role in affecting turnover and absenteeism. At Texasgulf, the hygiene factors are taken care of by the basic policies in the employee relations program. These factors are perceived by the majority of workers at Kidd Creek to be satisfactory. They include: company policy and administration, relations with supervision and peers, working conditions, security, salary, and fringe benefits.

With the hygiene factors met, workers can be motivated by the nature of the work itself, achievement, recognition, as well as opportunities for advancement and personal growth. At Kidd Creek, these motivators have been acknowledged in a number of ways. Expansion created many opportunities for career advancement. Recognition is provided in the form of financial rewards, by social status through company publications, but most importantly by Texasgulf's reputation as a fine place to work. The employees are proud of 'their' safety record. The nature of the work is challenging, and the individual attention by management reinforces the desire to perform and do well.

A third critical factor in the success of the program has been the recognition of the key role played by first line supervision. Enlightened management attitudes will not be perceived by operators if first line supervisors do not mirror them.

6. Herzberg, F., 'One More Time: How do you Motivate Employees?', *Harvard Business Review*, vol. 46, 1968, pp. 53-62.

Trust and rationality can be rapidly dissipated by poorly trained supervisors. At Texasgulf, however, the care given to selection and training of, and communication with, first line supervisors provides them with the skills to act effectively, and positions of status. The monthly crew meetings provide an opportunity for supervisors to show concern for their operators while providing leadership in a number of issues.

Many factors play a part in the success of the program. Working conditions, salaries, meetings, and executive visibility all contribute significantly. However, these factors would not be effective without the three key elements we have just described. In short, the success of the Kidd Creek scheme in the past can be ascribed to its integrity and comprehensiveness.

CAN THE PROGRAM CONTINUE TO BE A SUCCESS?

There are a number of symptoms that suggest that the program may be losing some of its effectiveness. Attendance at the semiannual meetings has declined in recent years, from an average 60 percent of the workforce to around 25 percent. There are not as many new developments occurring in the company, and some people have become bored with the meetings. In addition, new employees often receive little direct encouragement from their peers to attend these meetings because, to older employees, the meetings are 'old hat'.

This decline in attendance is complemented by a growing sense of a loss of intimacy. Before 1972, the personnel manager knew all 600 employees personally. This is impossible today, and with future expansions this sense of 'family' will be further lessened.

The opportunity for career advancement which existed when the operations were growing was a great motivator for many. However, as the size of the workforce stabilizes, the opportunities for rapid advancement occur less frequently, making it likely that this important motivator will be less effective in the future. No satisfactory substitute has yet been developed by management. This problem will be compounded if gold mining continues its apparent revival. Already, income differentials between Kidd Creek and other mines in the area have lessened substantially. As well, other company benefit programs have 'caught up' to those of Texasgulf. Consequently, younger employees may start seeking promotion opportunities elsewhere.

Finally, in addition to the problems of maintaining the positive attitudes that have been consciously created at Kidd Creek, there is an accompanying danger of management complacency. Their past efforts have been successful. However, for continued success, the program must remain fresh and adapt to changing conditions within the operations as well as among the workforce. As yet there is no evidence to suggest that complacency has developed but it should be consciously guarded against in the future.

CAN SIMILAR PROGRAMS BE DEVELOPED ELSEWHERE?

The management of Texasgulf was asked how their program could be repeated elsewhere. One manager stressed the nature of the workforce which exists at Texasgulf, citing the loyalty and trust which play a key role in the success of the program. Assuming that the attitudes between operators and management are positive, he suggests the following guidelines for other organizations:

- i) Top management's commitment is a necessary precondition. Without it, don't start.
- ii) The first observable act would be a physical clean-up of the entire operation. The employee and operating areas should be scrubbed, painted, and cleaned, so the employees can be proud of their workplace.
- iii) Begin organization changes which will make it clear that the welfare of the workers is paramount.
- iv) Train first line supervisors to observe the condition of the workplace and to act on necessary changes. Safety should be stressed, in particular, but all good supervisory practices should be followed.

These issues are important. If the organization is not committed to the concept, if all managers do not support the philosophy, troubles will occur. Brent Scott, president of Syncrude, emphasized the difficulties in training managers to fulfill the required roles. Not all supervisors can accept the required commitment, and those that cannot learn to accept the system must be replaced.⁷ The intensity required to implement the philosophy calls for a major investment in time and energy from the whole organization.

Once the organization accepts the commitment, the workers must be made to understand and feel treated as individuals. The workplace should be made safe, secure, and sufficient. Concern for safety is the most concrete way of showing concern for people; actions in this area speak louder than any amount of rhetoric. Security does not necessarily mean a guaranteed job, but rather is found in a system that treats individuals in a fair, just manner. A 'sufficient' workplace is one where the conditions are sufficiently clean and pleasant that employees can learn to like their work and their environment.

The commitment throughout the organization can occur only when top management monitors employee relations activities and provides visible evidence that these activities are important. Thus in Texasgulf, the review of team reports by the general manager is not make-work for him, but rather a conscious attempt to demonstrate the importance of these functions.

While each organization must work out the specifics according to its needs, the steps taken are those which increase levels of trust within the organization. Thus,

7. Scott, B., 'The 1984 Executive', speech to the Spring Conference, Personnel Association of Toronto, 1978.

actions which improve communication, resolve conflicts, and assist in problem solving are beneficial. Increasing the authority and responsibility of all individuals in the workplace, especially first line supervision, implies a high level of trust. In general, the best management actions emphasize a nonformal flexible approach to issues, with a focus on rational arguments.

Texasgulf provides a model for improved employee relations in Canada. The company had several built-in advantages in the early stages. A new and small operation, no union, generous funding, and a pool of experienced labour provided an initial edge to the program, but these factors alone were not sufficient. Senior management commitment, concern for individuals, first-class first line supervision, and an enviable communications program have all made essential contributions to the success of Texasgulf's employee relations program.

APPENDIX I

GENERAL ITEMS CONTAINED IN THE ATTITUDE SURVEY:

Job demands
Working conditions
Pay
Employee benefits
Friendliness and cooperation of fellow employees
Supervisor-employee interpersonal relations
Confidence in management
Technical competence of supervision
Effectiveness of administration
Adequacy of communication
Security of job and work relations
Identification with the company
Opportunity for growth and advancement
Reactions to the survey

Source: Company records.

FOUR MODELS OF EMPLOYER-EMPLOYEE RELATIONS IN THE MINING INDUSTRY

by

Peter Warrian

INTRODUCTION

Mining, almost by definition, is not an urban enterprise. At the same time, mining employers must compete with an urban labour market for much of their workforce. Further, in mining communities employees often encounter their employers in two contexts, the first in the workplace, and the second as landlord. This has determined much of the content and character of evolving patterns of employer-employee relations, both on and off the job in the mining industry.

In the following presentation, I would like to make some comments on employer-employee relations in the mining industry, with particular reference to their changing patterns over time. Towards this end, I would like to distinguish four models which have evolved and are still evolving:

- i) the classical model of the nonunion era
- ii) the corporate model of the 'Company Town'
- iii) the social-planning model
- iv) the neoclassical model of the 'Fly-In'.

CLASSICAL MODEL OF THE NONUNION ERA

Canada's first permanent mining communities were established in the late 19th

century, in such places as Glace Bay, Kimberley, Thetford Mines and Timmins. It was a period lasting roughly from 1875 till the first world war.

Employer-employee relations in this period were a one-way street. Employers had little regard for the living conditions of their employees, and took no direct responsibility for their welfare. Poor housing and poor health predominated.

On the employee's side, there were no collective agreements and no permanent union representation or organization. A succession of labour unions bloomed with the ebb and flow of economic conditions: the Provincial Workmen's Association, Western Federation of Miners, Industrial Workers of the World, One Bit Union, etc.

Employer-employee relations of the time might best have been summed up by the notice of layoff given to the Dunsmuir coal miners at the outbreak of World War I: the pink slip simply said 'King and Country Need You - We Don't.'

CORPORATE MODEL OF THE COMPANY TOWN

The period from the 1920s to World War II witnessed a large-scale expansion of mining, and along with the expansion of the industry came the development of mining communities in the form of the 'Company Town.' To attract and hold a proper workforce, the mining companies, in competition with the urban labour market and with each other, assumed responsibilities for developing more attractive mining communities. This included housing, and hard and 'soft' services to at least a minimal degree. It also meant that employers encountered their employees both as workers and as heads of households. Further, and as a related development, the 1920s saw the spread of employer-initiated employee benefit plans, covering medical care and pensions.

In the later years of this period, the patterns of employer paternalism were challenged and broken by the spread of unionization. The first struggles of the Mine-Mill and the Steelworkers were for recognition and the signing of collective agreements. These struggles were ultimately successful, but the content of such collective agreements was, for the most part, restricted to a minimum of wage, hours and seniority provisions. The characteristic attitude of management was captured in the phrase that everything beyond the bargained wages and hours was 'the sole prerogative of management.'

SOCIAL-PLANNING MODEL

In the post-World War II period of the 1950s and 1960s, direct competition with urban labour sources, rising expectations of employees formed by urban society, and the changing role of government resulted in a further development, which I shall call the Social-Planning Model of mining community development.

Most fundamental in the changes has been the shift of community development responsibility from the mining companies to government. Even in very remote locations, where the employer still carries the prime responsibilities, government regulations, standards, and services have a presence. It creates, in effect, a three-party planning process involving the company, the union and government.

The planning process includes town planning, architectural design, social and physical services, and all the amenities we now accept as necessities. Examples of very advanced forms of integrated planning and administration are the communities of Leaf Rapids and Fermont. As a kind of second-chance replay, this planning process is now underway in the expansion of the Elliot Lake mines and community.

This model and stage of development represents obvious progress and benefit for both employees and employers. However, this development has also brought with it several complicating factors and sources of potential conflict that are worth commenting upon.

Firstly, the bargaining process: the development of mining communities and the range of services associated with them have, unavoidably, over-lapped into the collective bargaining arena. We now come to the bargaining table with such 'off the job' items as rents, heating fuel supply, electricity rates, transportation to and from work, transportation in and out of the community, etc. These are valid and valuable bargaining items, in our view. However, they are a part of the evolving patterns mentioned above, and have at times led to further strain on the bargaining processes and even to strikes, as at Shefferville and Pine Point.

Secondly, the evolution of the social-planning phenomenon may also introduce a new and political factor. We have already made reference to the introduction and presence of the government as a third party in the whole relationship. Further, the new non-wage-and-benefit issues, such as occupational safety and health and environmental problems, have the potential to politicize and polarize employer-employee relations. I don't wish to dwell on divisive issues. However, I think any serious observer of the current scene must admit the realities and potentialities of where we now stand. The burden and responsibility is upon us all to seek productive and cooperative solutions (the 'us' also includes the government, necessarily, because we can't turn back the clock).

NEOCLASSICAL MODEL OF THE 'FLY-IN'

The 1970s have seen the introduction of an entirely new and different concept, the 'fly-in', such as at Rabbit Lake. Calling it new and different, however, doesn't mean it doesn't have a familiar ring to it. For this reason I have termed it a 'neo-classical' model of employer-employee relations.

The appeal of the fly-in, to the company, is presumably its cost-saving and

efficiency. Flying workers into isolated mine sites for extended work schedules of, say, seven 12-hour shifts, then out again, saves the company the time, effort, and capital investment which would otherwise be necessary to build and maintain a proper residential community. In our view, this concept and practice is questionable, both from the point of view of the employee and with respect to public policy.

First, for the cynically-minded, the fly-in arrangement may be an inducement to high-grading and fly-by-night operations that can only hurt our social development, create further instability in the resource sector and injure the economy.

Second, at best the jury is still out with respect to the efficiency of this scheme. Whether the vaunted benefits of productivity and reduced absenteeism will be sustained is not yet clear. We have a real fear that accident rates will increase, due to employee fatigue from extended shifts. Further, and most troublesome, because of the peculiar problems of mining and milling processes, we are concerned about deteriorating occupational health. The present safety system is predicated on exposure levels over the course of an eight-hour shift and then time away from exposure for your body to rest and recover. Seven-day twelve-hour shift scheduling does not compensate, physiologically, even with the following week off.

Third, there is the social and human factor of the employee and his or her family. It is most popular with young, single workers. It is decidedly less popular with older, married workers who do not favour prolonged absences from their families. It should also be said that many aren't much in favour of the flying; if anything, they'd like to see a fast train system. I believe that in the long term, if the fly-in model is pursued, it will have to be adapted to the family needs of employees, which may mean commuting on a daily basis, if at all.

In conclusion, the fly-in warrants classification as a 'neo-classical' model of employer-employee relation because it is, in a modified form, an attempt to step back and reduce the employer's responsibility and obligations for the welfare of its employees and their families' welfare.

FUTURE DIRECTIONS

In conclusion, I would like to make some personal observations on future directions in collective bargaining in Canada. First of all, and with respect to the works councils of West Germany, mentioned by Mr. Bennett, I would like to point out that the councils evolved in a situation where there is national bargaining, whereas in North America unions deal with individual firms on a local basis. Adoption of the works council approach here might require a move toward national bargaining.

It is clear that the collective bargaining process is evolving towards a much broader base, as issues other than wages and hours of work have become matters for

discussion. The biggest single initiative in the last ten years has involved occupational health and safety. This has taken place against the background of general concern over occupational health, and has won gains for workers in the form of such things as safety committees, work inspections, and the right to refuse.

However, there have also been some adverse effects in the same area. For example, under Bill 139 employees function as worker-inspectors and in this role are not to act as representatives of the union. This has the effect of undercutting the role and function of the union. Furthermore, there is a problem for the union in distinguishing when its role is that of advocate, and when it is that of policeman.

Over the next decade, I visualize that the main development in collective bargaining will be the further expansion of areas of union responsibility. In order to achieve this, we will have to support the position of the Canadian Labour Congress on corporate disclosure. Unions will require basic information in areas such as markets, inventories, the financial position of the company, the general state of the economy etc. With this information in hand, unions will expect to make significant input into decisions relating to matters such as employment and personnel policy, allocation of the workforce, and the economic affairs of corporations.



EMPLOYEE RELATIONS INITIATIVES

Digest of the Discussion

Employee relations initiatives are generally undertaken to ensure that employees are satisfied with their conditions of employment. By virtue of the remote location of most mines and the heavy involvement of the employer in, for example, community life, employee relations initiatives in mining are also concerned with wider aspects of the quality of life. These initiatives serve both employers and employees since, in the process of making life more pleasant for their employees, employers hope to improve their chances of recruiting and retaining competent workers. Provision of high wages has not been enough, in itself, to ensure employee satisfaction. This is demonstrated by the manpower problems experienced by the mining industry, in spite of wage levels second only to those in the construction industry.

Sources of labour for the mining industry have varied over the years. During the 1930s, workers were glad to find work, and turnover was relatively low. Following the second world war, immigrants were an important source of labour. Increased mechanization of farming and the seasonal nature of the work brought in a great many workers from rural areas. Immigration has since declined sharply, and seasonal labour is no longer as attractive, either to employees or to their employers. The educational level and quality-of-life expectations of potential employees, from urban areas in particular, are increasing at the same time that new operations tend to be located in increasingly remote parts of the country. Native people, who are accustomed to living conditions in northern areas, and are therefore logical potential employees for the industry, are often handicapped by inadequate educational and training opportunities.

As a consequence of these and other factors, there are predictions that labour for the mining industry as a whole will be in short supply for the foreseeable future. Mining employers have therefore recognized the need to find out who are the potential employees, and what inducements in the form of employee relations initiatives will attract them to mining. The industry offers more scope for improvement in living and working conditions and training facilities than most. Operations are often located in remote and isolated regions, with few social, commercial, or educational facilities. Working conditions tend to be demanding and even uncomfortable. Layoffs are more frequent than in most industries, due both to the cyclical nature of metals markets and to the inevitable depletion of mineral deposits.

Discussions focused on initiatives that have been undertaken to deal with these areas of concern, as well as on suggestions for new initiatives that might further serve to improve employee relations in Canadian mining, and thus improve the recruitment and retention of labour in the industry.

QUALITY OF LIFE

Problems Addressed

Problems related to the quality of life in mining communities generally arise from the smallness and isolation of the community. Ignoring mitigating factors such as natural beauty and positive management attitudes, the problems of daily living seem to be greatest in small single-resource towns with no road access to major urban areas. Among the areas of concern identified were:

- i) the lack of educational and cultural opportunities
- ii) the quality and availability of housing
- iii) the lack of variety in shopping and social facilities
- iv) the lack of employment opportunities for dependents of employees
- v) the attachment of native peoples to their traditional communities and lifestyle.

Initiatives Suggested

Gulf Mineral's Fly-In Scheme

Proponents of the fly-in scheme maintained that it deals with all these problems in a positive way, because employees have been able to continue to live in the sort of community they prefer. At Gulf's Rabbit Lake operation, about 40 percent of the employees live in the Saskatoon area, with access to a variety of housing, shopping, social and cultural facilities, and a complete range of educational institutions.

Furthermore, workers who prefer to live in remote northern areas can continue to do so. The seven-day shifts permit native people to pursue traditional activities such as hunting and trapping at the same time that they adhere to a rigid work schedule. The schedule has also been used to advantage by workers from the south, some of whom operate businesses or farms, with the help of their families, while holding full-time positions at Rabbit Lake.

Participants who criticized the scheme's effect on the quality of life identified the fear of flying and the long periods of separation of employees from their families as being major disadvantages. Gulf representatives admitted that screening during recruitment has not been completely effective in eliminating these problems. Among those who have terminated employment, fear of flying was a major cause of dissatisfaction. Other workers reported that domestic problems had been aggravated by the seven-day absences. There were also some problems with workers who tended to spend their seven days away from the site drinking.

Sherritt Gordon's Leaf Rapids Project

The town of Leaf Rapids represents a second approach to providing a pleasant life-style for employees of mining companies with northern operations. Problems with the planning of the town were foreshadowed by disagreements between Sherritt Gordon and the Government of Manitoba on the optimum proportion of single family dwellings and on the use of a unibuilding rather than an open town square.

The unibuilding design was an attempt to provide the residents of Leaf Rapids with commercial, social, and public facilities comparable, in quality if not in variety, with those available in large urban centres. Several suggestions were offered for avoiding some of the problems that were encountered at Leaf Rapids, including: clear division of ownership and responsibilities among the occupants of a unibuilding; separation of schools from commercial facilities and bars; provision of two gyms, to permit all shift-workers to use sport facilities; provision of adequate storage and service areas; and provision of serviced land for commercial and recreation facilities around the centre and scattered through the townsite, including the residential areas.

The Sherritt representative pointed out that, in the current expansion of housing facilities at Leaf Rapids, the company is emphasizing construction of homes by owners in five-acre unserviced lots surrounding the present residential areas. This meets employee preference for single family units, and lowers the cost of servicing the land. In addition, the satisfaction of people who choose to live in the north because of its outdoors recreational potential is believed to be enhanced by the opportunity to live on such an acreage, rather than in a subdivision.

Other Suggestions

The two approaches discussed above represent management initiatives in establishing or protecting the life style of employees. Further initiatives that might be considered by companies, particularly in the building of company towns, included:

- i) Use of a wooden ground floor instead of a basement, with living quarters on the second floor. This would entail a much smaller investment than an in-ground basement, and would therefore be easier to abandon once the local mine had been depleted. The second story could be moved to a new site if necessary.
- ii) Use of mobile homes to provide attractive and comfortable dwelling units for relatively short periods of time: portable towns, in effect.
- iii) Employment opportunities for dependents of employees: for example, Selco Mining Corporation has had good results using women in its security force, as has the Iron Ore Company of Canada, employing women in its concentrator mills.
- iv) Encouragement of cooperatives for shopping facilities.
- v) Avoidance of segregation of senior management from workers, in residential areas and in social situations.
- vi) Deferred compensation, with taxes payable when compensation is actually received.
- vii) Early retirement, as in the military services.

The increased role of governments in determining the lifestyle in remote communities was noted by participants, who pointed out the growing interest of governments in promoting the concept of a central resource town, serving a number of resource industries, instead of towns dependent on a single nonrenewable resource. Suggestions for government initiatives in the area of quality of life in the north included:

- i) studies of the lifestyle preferences of potential employees in northern areas
- ii) lower taxation for residents of remote areas
- iii) subsidisation of the costs of sending high school age children to school in larger communities, rather than building small high schools in remote areas.

WORKING CONDITIONS

Problems Addressed

Problems arising from working conditions were considered under two general areas. The first involved those problems directly related to daily on-the-job experience, and included:

- i) health and safety
- ii) training and opportunities for advancement.

The second area dealt with company-related issues, such as

- i) labour-management relations, including collective bargaining and industrial disputes
- ii) job security.

In both areas, there was a consensus that responsibility for dealing with these problems does not lie solely with management, but is also shared by employees and unions, and, in some cases, by governments. A common theme which ran through all the discussions of employee relations was the importance of good two-way communications, reaching every level of the work force and of management.

Initiatives Suggested

Health and Safety

Concern for the health and safety of employees was described as a matter of fundamental importance, both to employers and to employees. Management will realize long-term benefits in the form of good morale and retention of experienced employees, while employees will be protected from the hazards and discomforts inherent in mining. The example of Texasgulf was cited, where safety concerns are of prime importance and production bonuses are not offered to mining staff. The safety record at Texasgulf is excellent, employee morale is high, retention is high, and production levels meet management expectations. This was contrasted with the example of a firm which had emphasized production rather than safety, and as a consequence experienced severe employee relations conflicts until this philosophy was reversed.

Health and safety problems were seen by some participants as a possible major drawback to the fly-in scheme, particularly in the case of uranium mining. It was feared that the long shifts (for example, at Rabbit Lake, eleven hours per day for seven consecutive days) would lead to excessive fatigue and a concomitant increase in accident rates. Furthermore, industrial guidelines concerning protection from radiation exposure are based on eight-hour shifts, with 16 hours between shifts. One concern is that problems may not surface until much later. It will take some time before the health and safety implications of such novel schemes can be fully evaluated.

In defence, Gulf Minerals representatives pointed out that workers are free to take rest or food breaks at any time. Supervisors are in fact encouraged to look for signs of fatigue and to suggest breaks for employees who appear to need them. With respect to radiation exposure, employees are constantly monitored for signs of radiation exposure, using the most advanced techniques and criteria. Women, who are more susceptible than men to radiation hazards, are not employed in high-risk areas. In the event that underground mining should be initiated or hot-spots encountered in the open pit, Gulf envisions divided shifts with, for example, four hours in the mining area and the balance of the shift in other areas.

Training and Opportunities for Advancement

The opportunity for advancement is a vital ingredient of job satisfaction for many employees, and requires both on-the-job training and accessible job openings. At the same time, management requires a high degree of skill for most of its areas of operation. On-the-job training is therefore a major task of mining companies, particularly for those with ongoing recruitment programs, whether due to expansion or to high rates of turnover.

At Sherritt, for example, it was estimated that about 10 percent of all mining employees are in apprenticeship programs, and 50 or 60 percent of all workers are in training for upgrading. It is in the interest of both employer and employee that such training be of the best possible quality. This poses severe problems of expense, particularly for smaller companies.

It was suggested by some that rigid classification schemes and seniority requirements, such as those imposed under union contracts, limit vertical mobility and inhibit horizontal mobility. The lack of classification schemes in nonunion firms may provide management with increased flexibility in employee relations, but at the same time it increases the number of options and therefore the complexity of the management task.

Participants noted several examples of firms that have benefited from such flexibility in job classification.

At Gulf Minerals, for example, starting all employees at the level of operator rather than labourer has enhanced morale and contributed to job satisfaction and low turnover. In addition, the horizontal mobility among workers at Rabbit Lake has facilitated flexibility, for example on the occasions when flights have been delayed or cancelled. Texasgulf representatives felt that the fact that all employees are considered staff, and receive a salary rather than hourly wages, has contributed to good morale and loyalty in its work force. At the same time, the absence of strict guidelines concerning job classification, promotion, and other issues has made the job of front line supervision more difficult.

Labour-Management Relations

There was further discussion of the differences in labour-management relations between firms with and firms without a unionized labour force. Some participants felt that the presence of a union polarizes issues and individuals, and leads inevitably to an adversary relationship and to conflicts. Opponents of this view pointed out examples of both good and bad labour-management situations within unionized firms, and expressed the view that in most cases these differences have stemmed from differences in management philosophy rather than from the presence or absence of unions.

There was general agreement that a positive management philosophy, stressing concern for the job satisfaction and welfare of employees, was an essential ingredient in good labour management relations. Implementation of this philosophy in turn requires a good communications system. Participants pointed out that effective communications involve an interchange of ideas, using techniques that must be learned by all participants. They also cautioned against using communications as a management 'buzz-word', or as an end in itself, rather than as a means to resolve problems and accomplish goals.

Suggestions for improvements in communications centred around means of making known the respective needs and interests of management and of labour throughout all levels of the firm.

- i) *Works Councils* similar to those used in Europe were suggested as one approach. However, it was pointed out that these may not be applicable in the Canadian context, where negotiations are conducted at the level of the individual firm, and not at the industry or national level.
- ii) *Committees*, both within and outside of collective bargaining agreements, can be effective means of communication. The Iron Ore Company of Canada has established six committees under its collective bargaining agreement, and two additional committees, including a problem-area committee which does not deal with formal grievances and is believed to be quite effective in establishing two-way communications, particularly at the foreman-crew level.

Texasgulf, with a staff of about 2,000, reported that it has had good results from crew meetings at which all workers, in groups of 12 or 15, have an opportunity to express their views to their foremen and supervisors every 5 or 6 weeks. Senior management may also be requested to attend. Minutes are kept, questions are answered immediately or referred to appropriate sources, and when all questions are answered the minutes are posted. Any subject, any complaint, is open for discussion.

- iii) *Direct contact* between upper management and workers was recommended as being the most useful means of communication in times of extreme stress in labour-management relations. For example, it was suggested that when operations are resumed at Inco, personal contact between the company president and workers would be more useful than committee meetings in restoring confidence and harmony.

On a day-to-day basis, the direct contact between shop stewards and shift bosses was identified as an extremely important and vulnerable interface. It was recommended that both parties should receive training in grievance handling, problem solving, and human relations skills, and that both should be kept informed of company policies and plans that will directly affect the work force. One firm and union have instituted a joint training scheme for shop stewards and first-line supervisors, with good results.

- iv) *Surveys* have been used by some firms as a source of information on employee concerns and attitudes. In two cases reported, specific areas of concern have been identified and dealt with by management. For example, the need for good communications was emphasized by respondents in both surveys, and was met, in the case of Cyprus Anvil, by the Report to Employees, and by Iron Ore Company of Canada through its committees.

Job Security

The problem of providing long-term job security is endemic in the mining industry, as a consequence of the inevitable depletion of mineral deposits. However, participants reported that in most cases this is not a factor in recruitment, particularly in remote areas, because employees seldom expect to stay longer than three to five years. In some instances companies have reported difficulties in interesting employees in pension plans.

Problems of short-term disruptions due to layoffs are of more immediate concern. Because of the scale of mineral operations and the cyclical nature of mineral markets, these disruptions have recently become social and economic issues affecting whole communities and even regions. A number of initiatives were suggested to avoid such occasions, or to alleviate their impact.

- i) *Guaranteed employment*, such as that instituted by Lincoln Electronics in the United States, was considered inappropriate for the mineral industry, which is exposed to volatile supply and demand movements in international markets. Japan's efforts to maintain output levels and employment were cited, and it was noted that this has led to problems in that country. Inco also tried to maintain a stable work force in the face of a diminishing market, but inventories grew to an unmanageable level, forcing a major layoff.

- ii) *Turnover* was identified as an important safety-valve in times of production cutbacks in the past, permitting reductions of the work force through attrition. However, reductions in the rate of turnover, particularly in larger established communities, and the growth in the scale of mining operations, have greatly reduced the effectiveness of turnover as a means for dealing with production cutbacks.
- iii) *Work-sharing* schemes have been tried on a number of occasions but have not worked out well. Cominco, for example, was able to shut down for a month by extending vacations, but problems in the lead-zinc market have been of much longer duration. Brunswick Mining and Smelting has also tried a work-sharing scheme, with some of the cost shared by the Canadian government through a redistribution of unemployment insurance benefits. It was predicted that widespread use of work-sharing programs in Canada could lead to widespread abuses.
- iv) *Stockpiling programs* to tide producers over short periods of low demand were suggested. However, industry representatives noted that industries cannot finance big stockpiles, and suggested that, for example, the Ontario and federal governments would have had to assist Inco financially if it had continued production during the six-week shutdown in the summer of 1978.

RESPONSIBILITY FOR INITIATIVES

There was a general consensus that responsibility for good employee relations lies with labour as well as with management. In some cases, government involvement was recommended as well. There was disagreement, however, over the amount and areas of responsibility that labour and government should share with management.

Management Responsibility

A positive management attitude, expressing concern for the interests of the work force, will go a long way towards ensuring industrial harmony. Such an attitude is much easier to establish at the inception of an operation than after a period of discord. Whenever established, good relations can only be maintained in the presence of a good two-way communications system. It was recommended that management should accept at least part of the responsibility for most of the initiatives mentioned in the discussions, including:

- living conditions and quality of life in remote areas
- communications, both formal and informal
- health and safety
- on-the-job training.

Government Responsibility

The increasing involvement of governments in establishing the life-style of mine employees was noted. For example, governments are determined to promote the development of central resource towns in remote areas. In Nanisivik, the federal government insisted on a townsite rather than an exclusively fly-in scheme, in order to encourage a substantial component of native people in the work force. If governments are going to make such decisions, based at least in part on the needs of employees, it is essential that they study and define these needs. This was done to some extent before inauguration of the Rabbit Lake fly-in scheme, which required approval from the federal government under the Atomic Energy Control Act. The government considered briefs submitted by Gulf Minerals, the Canadian Labour Congress, the Saskatchewan Federation of Labour, and the Métis Society, before giving its consent to the method of operation.

In the case of government involvement in training mining employees, participants recommended that programs be coordinated (e.g. between departments of labour and departments of education) to ensure consistency and continuity. There is a crying need for a Canadian supply of skilled workers. Resolution of this problem is impeded by institutional barriers involving the educational system and entrenched interests.

Where governments are engaged in international negotiations, such as GATT, involving the interests of the mineral industry, it was recommended that tripartite committees be established to ensure that the government's strategy incorporates the views of the industry and of labour. The example of current OECD negotiations was cited, where a treaty may soon be signed by the Canadian representatives without formal input from the Canadian mineral industry or from Canadian labour. In contrast, for the recent Law of the Sea Conference, Canada has established a tripartite committee to ensure participation by interested parties.

In the area of labour-management negotiations, reference was made to an initiative of the Ontario government, which is in the process of establishing a preventive mediation arrangement. When invited by both labour and management, provincial mediators will be sent to participate in the early stages of negotiations, and will leave once discussions are under way.

Union Responsibility

Discussion of union responsibility centred on the speculations in Mr. Warrian's presentation regarding the future involvement of unions in decisions on the allocation of resources, including both labour and capital. Some participants expressed the view that only the owners of capital have a right to determine its disposition. In order to function in these areas, unions are seeking access to personnel

records, such as the distribution of the work force and changes over time. They are also demanding fuller corporate disclosure of company finances, investment decisions, sales, inventories, etc. It was suggested that, in the meantime, unions might consider seeking other sources of information, such as security analysts. It was noted that the present role of unions in areas such as quality of life in resource towns, layoffs, etc. usually consists of after-the-fact reactions, rather than participation in decisions. Tripartite consultation was seen as one way to increase the union input into decision making in these and other areas of employee relations.

CONCLUSION

In the area of quality of life, employee relations initiatives will be dictated by circumstances such as expected life of the mine, remoteness, costs, and government regulations, each of which must be studied and evaluated for every operation.

Management holds a major responsibility for working conditions and labour-management relations, with a positive management philosophy being the principal requirement for good employee relations.

Establishment of an effective two-way communications system is the second vital ingredient in ensuring good relations, and while this is primarily a management responsibility, effective communication requires input and cooperation from all concerned. Repeated reference was made regarding the crucial role of the foreman in the communications network.



APPENDIX I

PARTICIPANTS IN THE SEMINAR

Mr. J. Abson,
Ontario Conciliation and
Mediation Services,
Ministry of Labour,
Toronto.

Mr. N.G. Ashby,
Manpower Committee,
The Mining Association of Canada,
Toronto.

Mr. D. Bell,
Western Operations,
Eldorado Nuclear Ltd.,
Edmonton.

Mr. W.J. Bennett,
Iron Ore Co. of Canada,
Montreal.

Mr. J.R. Beveridge,
Institute for Northern Studies,
University of Saskatchewan,
Saskatoon.

Mr. R.L. Boudreau,
Employee and Public Relations,
Quebec Cartier Mining Company,
Port Cartier.

Mr. T. Cawsey,
School of Business and Economics,
Wilfrid Laurier University,
Waterloo.

Mr. W.F. Clarke,
Sherritt Gordon Mines Limited,
Lynn Lake.

Mr. W.O'D. Costello,
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Mr. S. Derrick,
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Mr. D.W. Goldsmith,
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Mr. D. Grenville,
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Texasgulf Inc.,
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Mr. O.A. Greiner,
London.

Mr. J. Hainey,
Selco Mining Corp.,
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Mr. S. Jones,
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Mr. P. Warrian,
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Sherritt Gordon Mines Ltd.,
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Mrs. M.J. Wojciechowski,
Centre for Resource Studies.

APPENDIX II

PROGRAM OF THE SEMINAR

Wednesday, November 22nd

5:30 p.m. - 6:30 p.m.	Registration and reception
6:30 p.m. - 7:45 p.m.	Dinner
8:00 p.m. - 9:30 p.m.	W.J. Bennett, The Iron Ore Company of Canada <i>Manpower Issues in Canadian Mining</i>
9:30 p.m. - Onwards	Private study

COMMUNITY DEVELOPMENT ALTERNATIVES

Thursday, November 23rd

8:30 a.m. - 9:50 a.m.	F. Nogas, Gulf Minerals <i>The Rabbit Lake Fly-In Scheme</i>
9:50 a.m. - 10:10 a.m.	Coffee
10:10 a.m. - 11:30 a.m.	W.F. Clarke, Sherritt Gordon Mines Limited <i>The Leaf Rapids Community Development</i>
11:30 a.m. - 1:00 p.m.	Lunch, private study
1:00 p.m. - 2:50 p.m.	Open session discussion
2:50 p.m. - 3:10 p.m.	Tea

EMPLOYEE RELATIONS SCHEMES

3:10 p.m. - 4:00 p.m.	S. Jones, Cyprus Anvil Mines Limited <i>The Employee Report</i>
4:00 p.m. - 5:00 p.m.	T. Cawsey, Wilfrid Laurier University P.R. Richardson, Queen's University <i>The Texasgulf Employee Relations Scheme</i>
5:00 p.m. - 6:30 p.m.	Open session discussion
6:30 p.m. - 8:00 p.m.	Dinner
8:00 p.m. - 9:30 p.m.	P. Warrian, United Steelworkers of America <i>Employer/Employee Relations: Some Trade Union Perspectives</i>
9:30 p.m. - Onwards	Small group discussion

Friday, November 24th

8:10 a.m. - 9:45 a.m.

Small group discussion

9:45 a.m. - 10:00 a.m.

Coffee

10:00 a.m. - 12:00 p.m.

Summary discussion.

THE AUTHORS

William J. Bennett graduated from the University of Toronto in 1934. He returned in 1955 to receive an LL.D. in recognition of his public service, which began under C.D. Howe in 1935 and led to the presidency of both Eldorado Mining and Refining and Atomic Energy of Canada. He has recently retired as president of the Iron Ore Company of Canada.

Tupper F. Cawsey is a graduate of Royal Military College, and holds MBA and Ph.D. degrees from the University of Western Ontario. After teaching at Western, he joined the staff of Wilfrid Laurier University, where he is dean of the School of Business.

W.F. Clarke was born in Quebec City in 1912 and grew up in Clarke City, on the St. Lawrence north shore near Sept-Iles. After graduation from Bishop's College, he worked in all phases of operations with Anglo Canadian Pulp and Paper Company. Following the second world war, Mr. Clarke spent several years in the import-export business and as a financial advisor. He joined Sherritt Gordon in 1958 as personnel manager, and became manager of personnel and industrial relations with Sherritt in 1969.

James P. Fulcher was born in Brantford Ontario and is a graduate of the University of Guelph. His professional career has included process experience in the mining industry as well as his current field of interest, employee relations. Mr. Fulcher is Employee Relations Manager for Gulf Minerals at Saskatoon, and has been responsible for the operation of the Rabbit Lake fly-in scheme.

Selwyn Jones was born in Cardiff, Wales, and was employed with Dynasty Explorations at the time of its amalgamation with Anvil Mining Corporation in 1975. At the present time Mr. Jones is vice-president, Administration, with Cyprus Anvil and based in Vancouver.

Fred R. Nogas graduated in economics from Queen's University, and did graduate work in industrial relations. In 1957 he joined the British American Oil Company, now Gulf Oil Canada, where he has held positions in the Corporate Employee Relations, Marketing, and Refining departments. In 1974 he was transferred to Gulf Minerals, as manager, human resources, where he participated in the start-up of the Rabbit Lake mine-mill uranium project.

Peter R. Richardson was born in Sheffield, England in 1947. He holds the degrees of B.Sc. (Honours) from Leeds University and Ph.D. in Business Administration from the University of Western Ontario. Following a teaching appointment at the Iran Center for Management Studies in Tehran, he joined the faculty of Queen's University in 1977. Dr. Richardson is an associate of the Centre for Resource Studies and an assistant professor in the School of Business.

Peter Warrian is a graduate of the University of Waterloo. As legislative director of the United Steel Workers of America, he participated in the Ontario Mining Act revision and prepared a submission for the Ham Commission hearings. Since 1974 Mr. Warrian has been Research Director for the United Steelworkers, and is based in Toronto.

THE CENTRE FOR RESOURCE STUDIES

The Centre was established in 1973 through the sponsorship of Queen's University, the federal Department of Energy, Mines and Resources, and The Mining Association of Canada. A multi-disciplinary research organisation, it attempts to bring the knowledge, experience, needs, and views of individuals from governments, industry, universities, labour, and other interested groups to bear on important issues underlying mineral resource policy. Mineral resources considered by the Centre include the metallic, industrial and non-metallic, and structural minerals, but exclude petroleum and natural gas.

The prime function of the Centre is to carry out a program of research and publication on mineral policy issues. The program provides research and educational opportunities in resource studies at Canadian universities, and furnishes reliable information to promote a more fruitful exchange between representatives of the various groups concerned with resource policy. Through the continuing support of the sponsors, research by qualified investigators is funded at the Centre, in various departments at Queen's University, and at other Canadian universities. The Centre's publications attempt not only to provide reliable data, but to present research results in a clear and readable form. Reports employ non-technical language, so far as the subject allows, to enhance their value to non-specialists. In this way, the Centre hopes to assist and broaden informed discussion of the issues.

The Centre is governed by a board of directors which decides general policy and establishes priorities for research. The Chairman is Mr. R. J. Hand, and the executive director is Dr. C. G. Miller. There are fourteen other members — seven nominated by Queen's University, four by The Mining Association of Canada, and three by the federal government. Guidance on the research program, together with discussion of policy issues and other matters, is provided by the Advisory Council. This body comprises all researchers associated with the Centre and other, appointed, members drawn from such groups as government's, industry, labour, and consumers. Committees of specialists aid in the development of projects and the selection of research proposals, and advise on the progress of the research. Aside from the main research program, which is carried out at the Centre and by means of contracts, small exploratory studies are funded through a system of grants-in-aid of research. The executive director and staff are responsible for the work of the Centre within this framework.

The Centre welcomes comments on its publications, proposals for research projects, or enquiries about any aspect of its work.

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